

SPLIT TYPE
AIR CONDITIONER
CASSETTE TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
AUXG30LRLB	AOYG30LBTA
AUXG36LRLB	AOYG36LBTA
UTG-UKYA-W	

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cooling & Heating	
INDOOR UNIT		AUXG30LRLB	AUXG36LRLB
DECORATION PANEL		UTG-UKYA-W	
OUTDOOR UNIT		AOYG30LBTA	AOYG36LBTA
POWER SOURCE		230 V, 50 Hz, Single phase	
Cooling	CAPACITY	8.50 kW	9.50 kW
	POWER CONSUMPTION	2.56 kW	2.96 kW
	EER	3.32 kW/kW	3.21 kW/kW
	OPERATING CURRENT	11.2 A	13.0 A
	MAXIMUM CURRENT	17.0 A	20.0 A
Heating	DEHUMIDIFICATION	2.5 L/h	3.3 L/h
	CAPACITY	10.0 kW	10.8 kW
	POWER CONSUMPTION	2.77 kW	2.91 kW
	COP	3.61 kW/kW	3.71 kW/kW
	OPERATING CURRENT	12.2 A	12.7 A
MAXIMUM CURRENT		17.0 A	20.0 A

FAN MOTOR

INDOOR UNIT	MFF-T80VA2F
OUTDOOR UNIT	MFE-60TVT

FAN REVOLUTION

INDOOR UNIT	High	560 r.p.m.	660 r.p.m.
	Medium	510 r.p.m.	560 r.p.m.
	Low	470 r.p.m.	510 r.p.m.
	Quiet	420 r.p.m.	430 r.p.m.
OUTDOOR UNIT	Cooling	850 r.p.m.	900 r.p.m.
	Heating	850 r.p.m.	900 r.p.m.

AIR CIRCULATION

INDOOR UNIT	High	1,600 m3/h	1,900 m3/h
	Medium	1,400 m3/h	1,590 m3/h
	Low	1,270 m3/h	1,420 m3/h
	Quiet	1,150 m3/h	1,180 m3/h
OUTDOOR UNIT	Cooling	3,600 m3/h	3,800 m3/h
	Heating	3,600 m3/h	3,800 m3/h

NOISE LEVEL

INDOOR UNIT	High	40 dB	44 dB
	Medium	38 dB	41 dB
	Low	36 dB	38 dB
	Quiet	33 dB	34 dB
OUTDOOR UNIT	Cooling	53 dB	54 dB
	Heating	55 dB	55 dB

COMPRESSOR AND REFRIGERANT

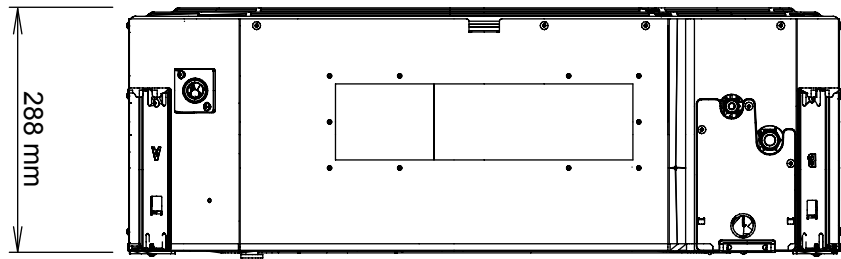
COMPRESSOR TYPE	Hermetic rotary type, 6 pole, Single phase, DC brushless motor		
DISCRIMINATION	N-TF30ND1A		
WEIGHT (with oil)	15.3 kg		
PRECHARGED REFRIGERANT	2,100 g		
REFRIGERANT TYPE	R410A		
FULL CHARGE	Piping length	20 m	2,100 g
		30 m	2,500 g
		40 m	2,900 g
		50 m	3,300 g
ADDITIONAL CHARGE	40 g/m		
MAXIMUM PIPING HEIGHT DIFFERENCE	30 m		

DIMENSIONS

INDOOR UNIT	H x W x D	288 x 840 x 840 mm
DECORATION PANEL	H x W x D	53 x 950 x 950 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm

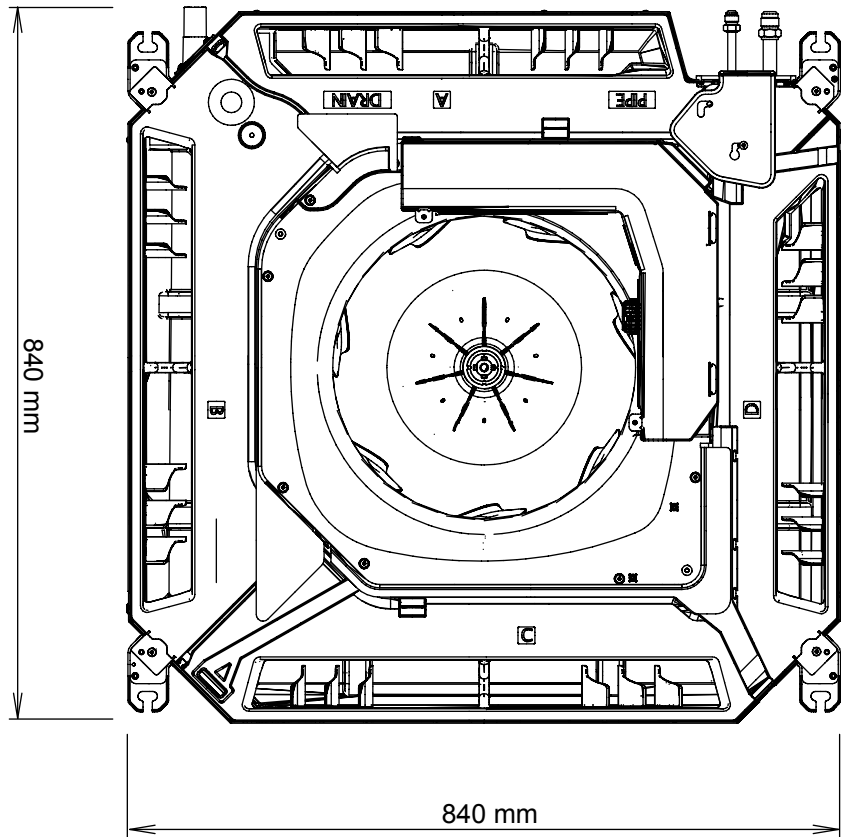
WEIGHT

INDOOR UNIT	Net / Shipping	26 kg / 32 kg
DECORATION PANEL	Net / Shipping	6.0 kg / 10.5 kg
OUTDOOR UNIT	Net / Shipping	61 kg / 68 kg



INDOOR UNIT

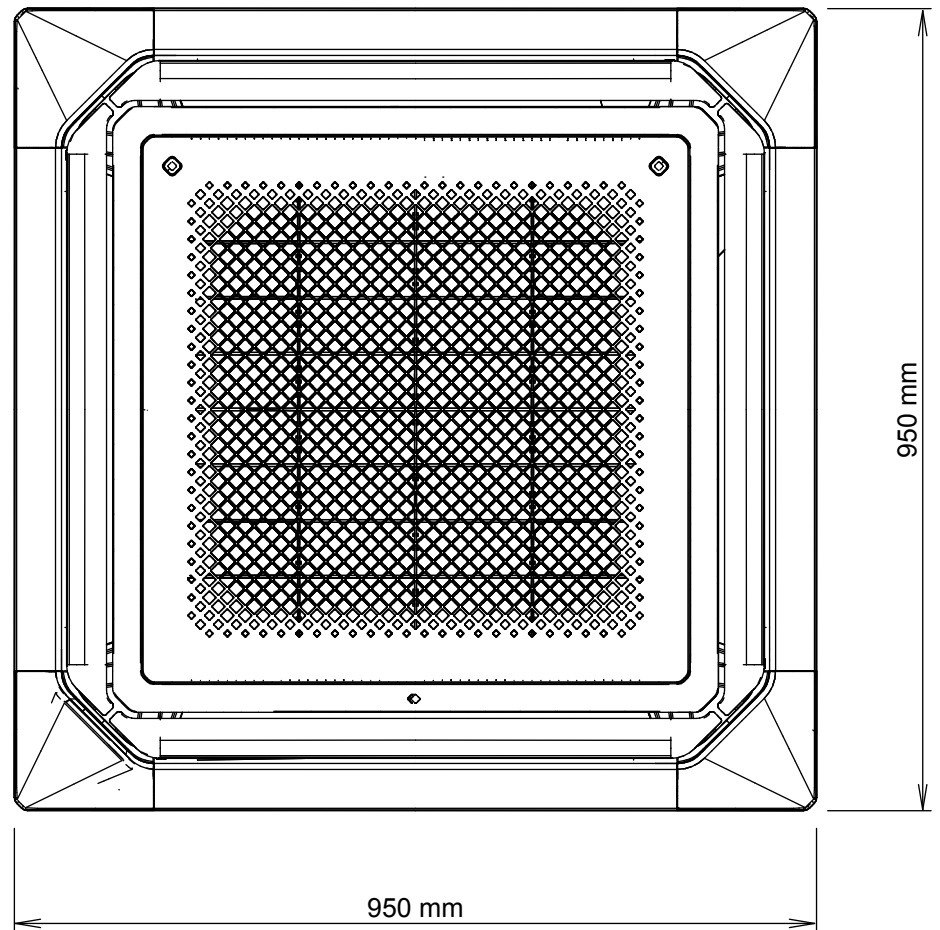
Drain pipe diameter
 Inside : 20 mm
 Outside : 26 mm



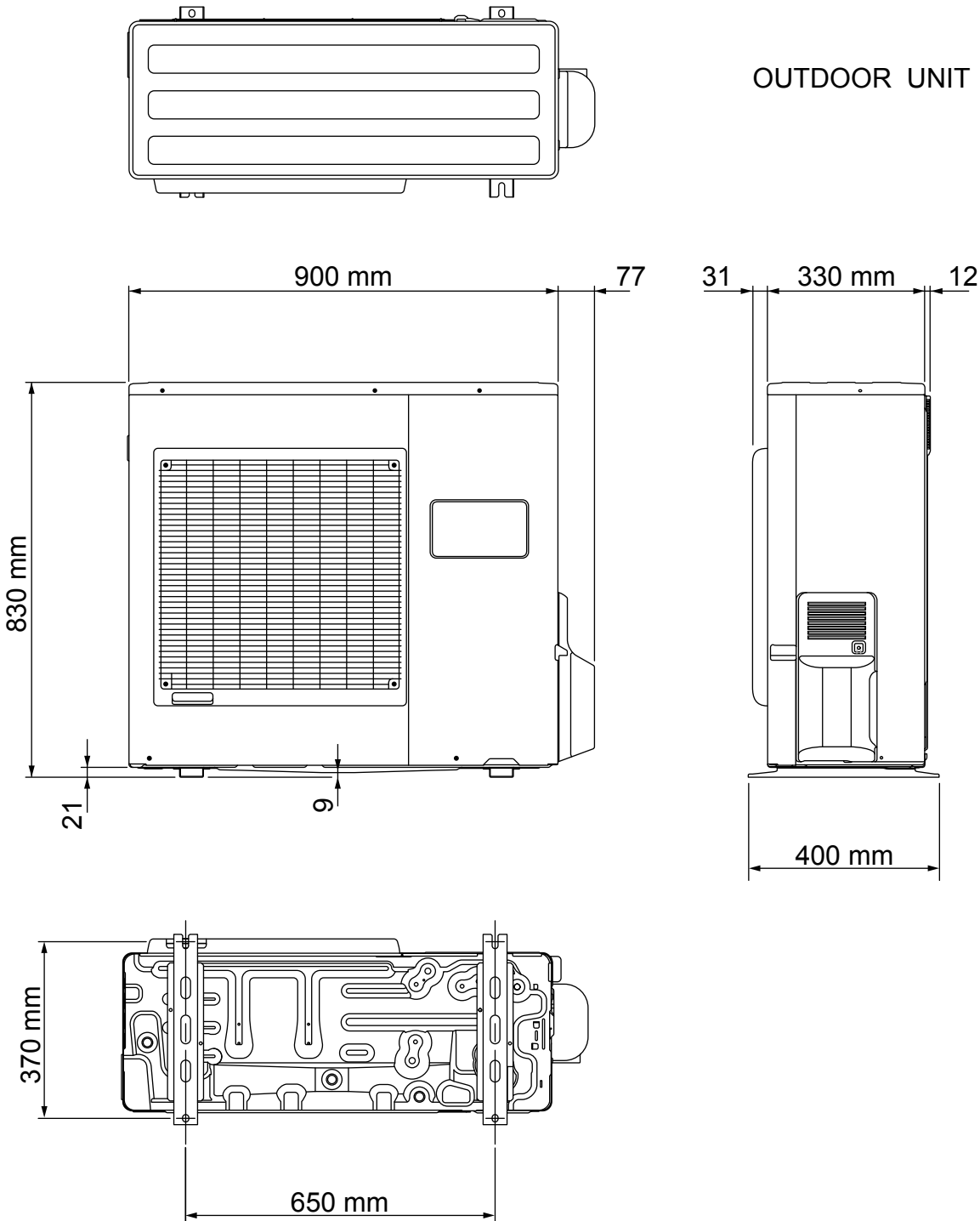
DIMENSIONS



DECORATION PANEL



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM

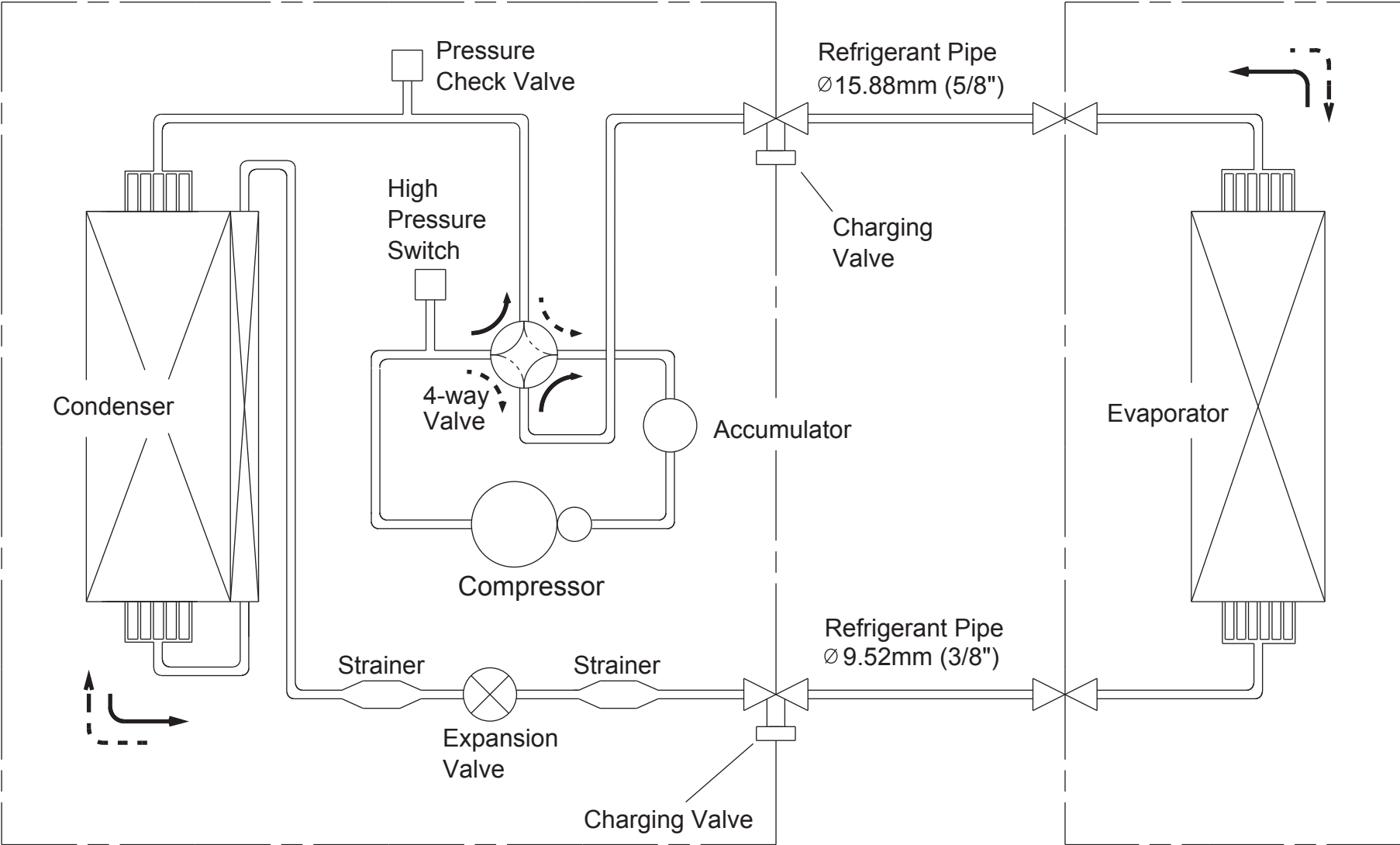
Refrigerant direction

—▶ : Cool

- - -▶ : Heat

OUTDOOR UNIT

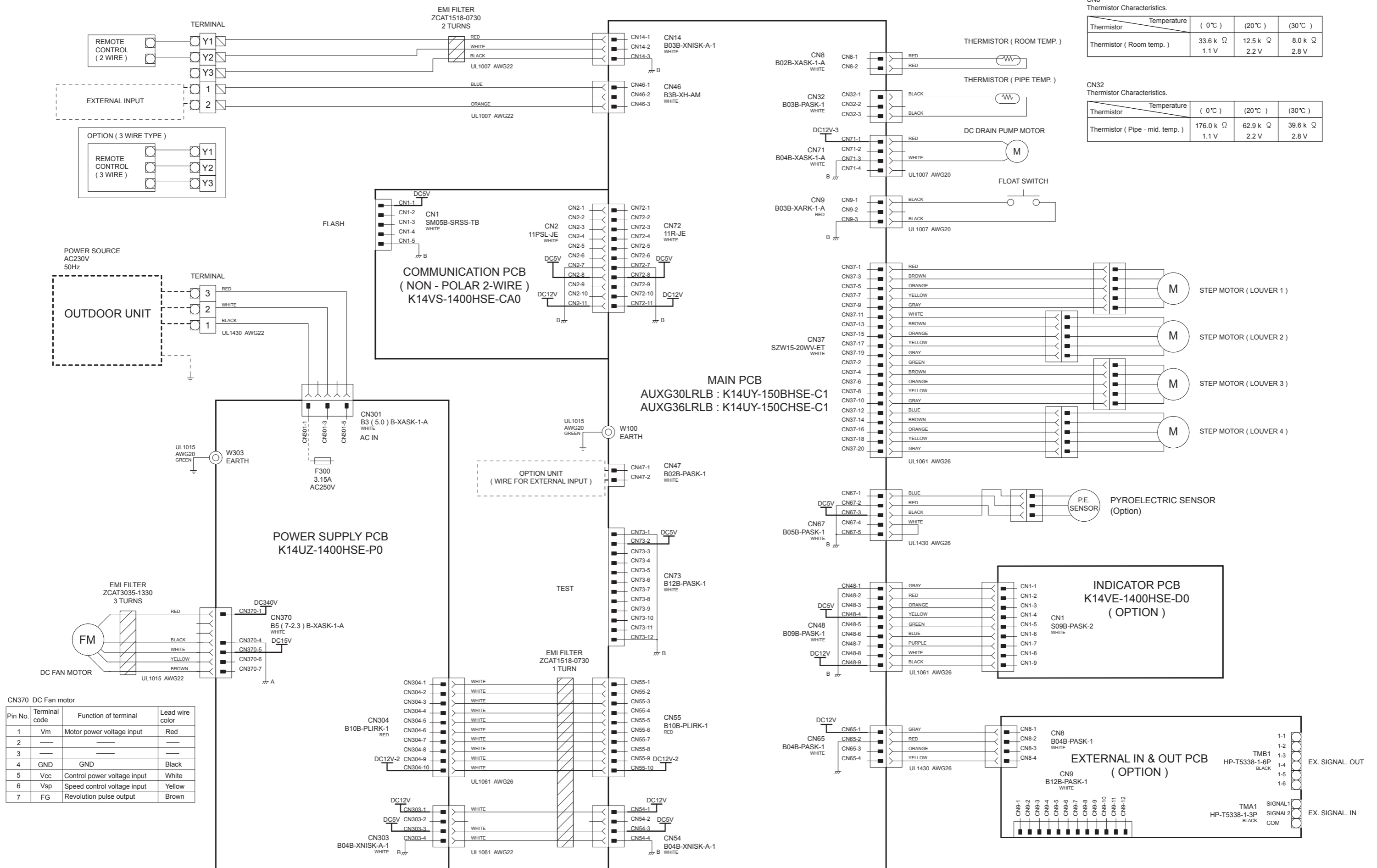
INDOOR UNIT



PCB CIRCUIT DIAGRAM

INDOOR UNIT

CONTROL UNIT AUXG30LRLB : EZ-01500HSE AUXG36LRLB : EZ-01501HSE



CN8 Thermistor Characteristics.

Thermistor	Temperature (0°C)	(20°C)	(30°C)
Thermistor (Room temp.)	33.6 k Ω	12.5 k Ω	8.0 k Ω
	1.1 V	2.2 V	2.8 V

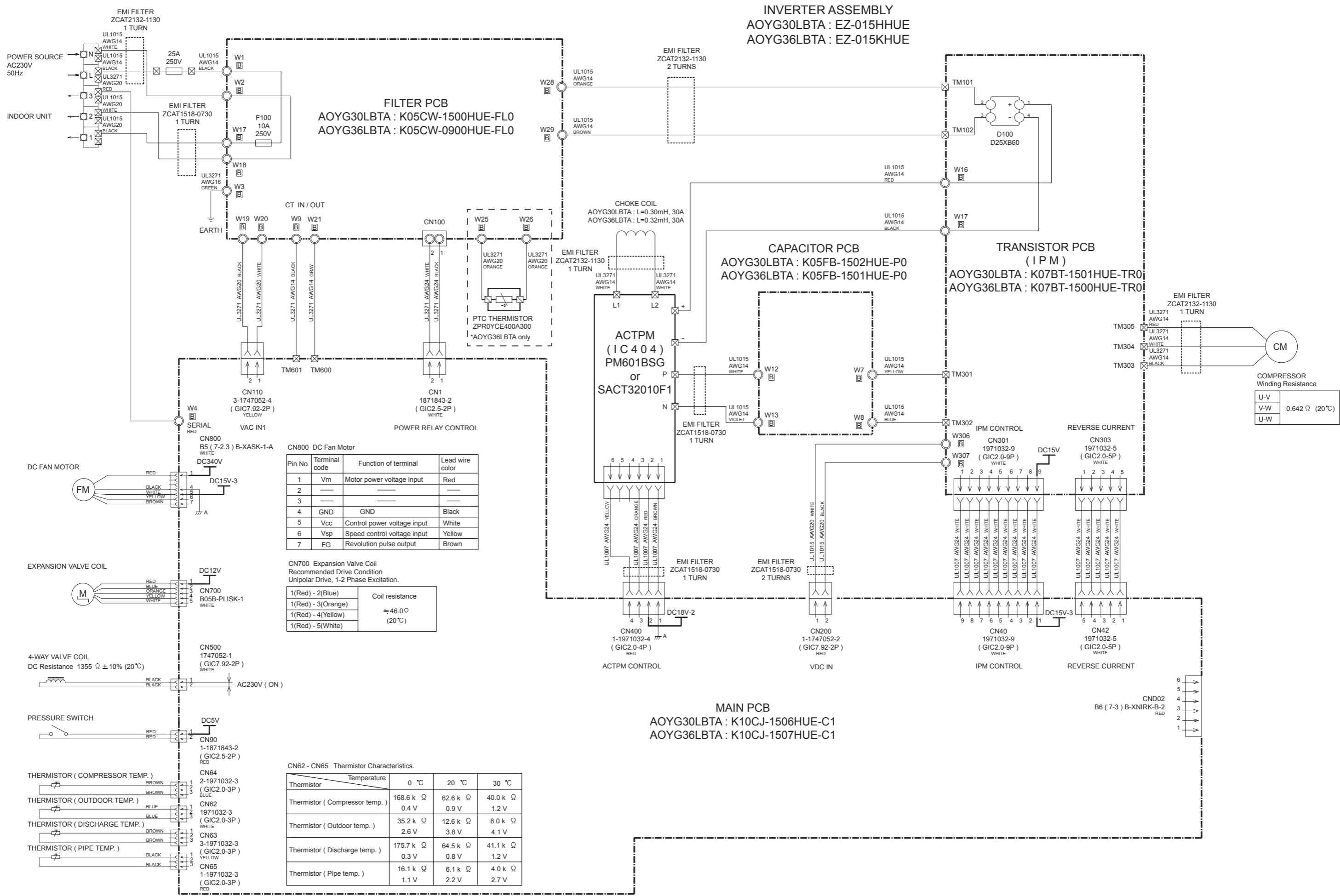
CN32 Thermistor Characteristics.

Thermistor	Temperature (0°C)	(20°C)	(30°C)
Thermistor (Pipe - mid. temp.)	176.0 k Ω	62.9 k Ω	39.6 k Ω
	1.1 V	2.2 V	2.8 V

CN370 DC Fan motor

Pin No.	Terminal code	Function of terminal	Lead wire color
1	Vm	Motor power voltage input	Red
2			
3			
4	GND	GND	Black
5	Vcc	Control power voltage input	White
6	Vsp	Speed control voltage input	Yellow
7	FG	Revolution pulse output	Brown

OUTDOOR UNIT



COMPRESSOR
 Winding Resistance

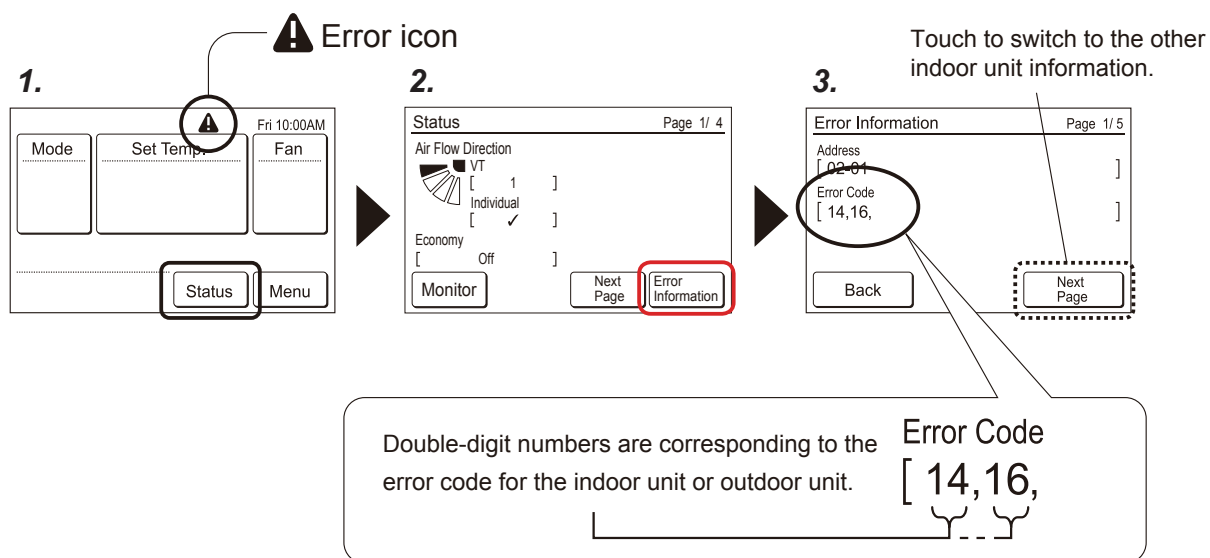
U-V	0.642 Ω (20°C)
V-W	
U-W	

ERROR DETECTION

Troubleshooting at the remote control LCD

UTY-RNRYZ1 (2-wire type)

1. If an error occurs, an error icon appears on the “Monitor mode screen”.
Touch the [Status] button. The “Status” screen is displayed.
2. Touch the [Error Information] button. The “Error Information” screen is displayed.
(When there are no errors, the [Error Information] will not be displayed.)
3. Double-digit numbers correspond to the error code in the table next page.
Touch the [Next page] (or [Previous page]) to switch to the other connected indoor units.

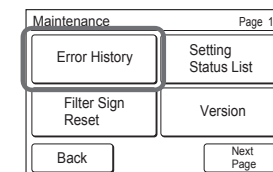


Triple-digit error code means the error of remote control itself.

Error code	Contents
CC.1	Sensor error
C2.1	Transmission PCB error
12.1	Wired remote control communication error
12.3	Number excess of device in wired remote control system
12.4	Wired remote control system start-up error
26.4	Address duplication in wired remote control system
26.5	Address setting error in wired remote control system
15.4	Data acquisition error

Error History (Triple-digit)

- (1) Touch the [Error History] on the “Maintenance” screen.



- (2) “Error History” screen is displayed. When the screen has multiple pages, they can be switched by touching the [Next Page] or [Previous Page].

No.	Date	Time	Address	Code
1	2015/ 8/ 1	11:00AM	002-01	141
2	2015/ 7/30	2:53AM	002-02	143
3	2015/ 7/25	8:53AM	002-02	143
4	2015/ 7/22	11:00AM	002-01	141
5	2015/ 7/22	11:00AM	002-01	141
6	2015/ 7/21	11:00AM	002-01	141

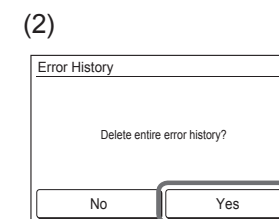
No.	Date	Time	Address	Code
7	2015/ 7/ 1	11:00AM	002-01	141
8	2015/ 7/10	2:53AM	002-02	143
9	2015/ 7/ 5	8:53AM	002-02	143
10	2015/ 7/ 2	11:00AM	002-01	141
11	2015/ 7/ 2	11:00AM	002-01	141

- (3) When the [Back] is touched after verification, the display returns to the “Maintenance” screen.

Erase the Error History

- (1) Touch the [Erase All] on the “Error History” screen.
- (2) A verification screen is displayed. When the [Yes] is touched after the history is cleared, the display returns to the “Error History” screen.

No.	Date	Time	Address	Code
1	2015/ 8/ 1	11:00AM	002-01	141
2	2015/ 7/30	2:53AM	002-02	143
3	2015/ 7/25	8:53AM	002-02	143
4	2015/ 7/22	11:00AM	002-01	141
5	2015/ 7/22	11:00AM	002-01	141
6	2015/ 7/21	11:00AM	002-01	141



If you use a wired type remote control, error codes will appear on the remote control display. When you use a wireless remote control, the lamps on the IR receiver unit will output error codes by way of blinking patterns. See the lamp blinking patterns and error codes in the table. An error display is displayed only during running.

UTY-RNRYZ1

Double-digit error code means the error for the indoor unit or outdoor unit.

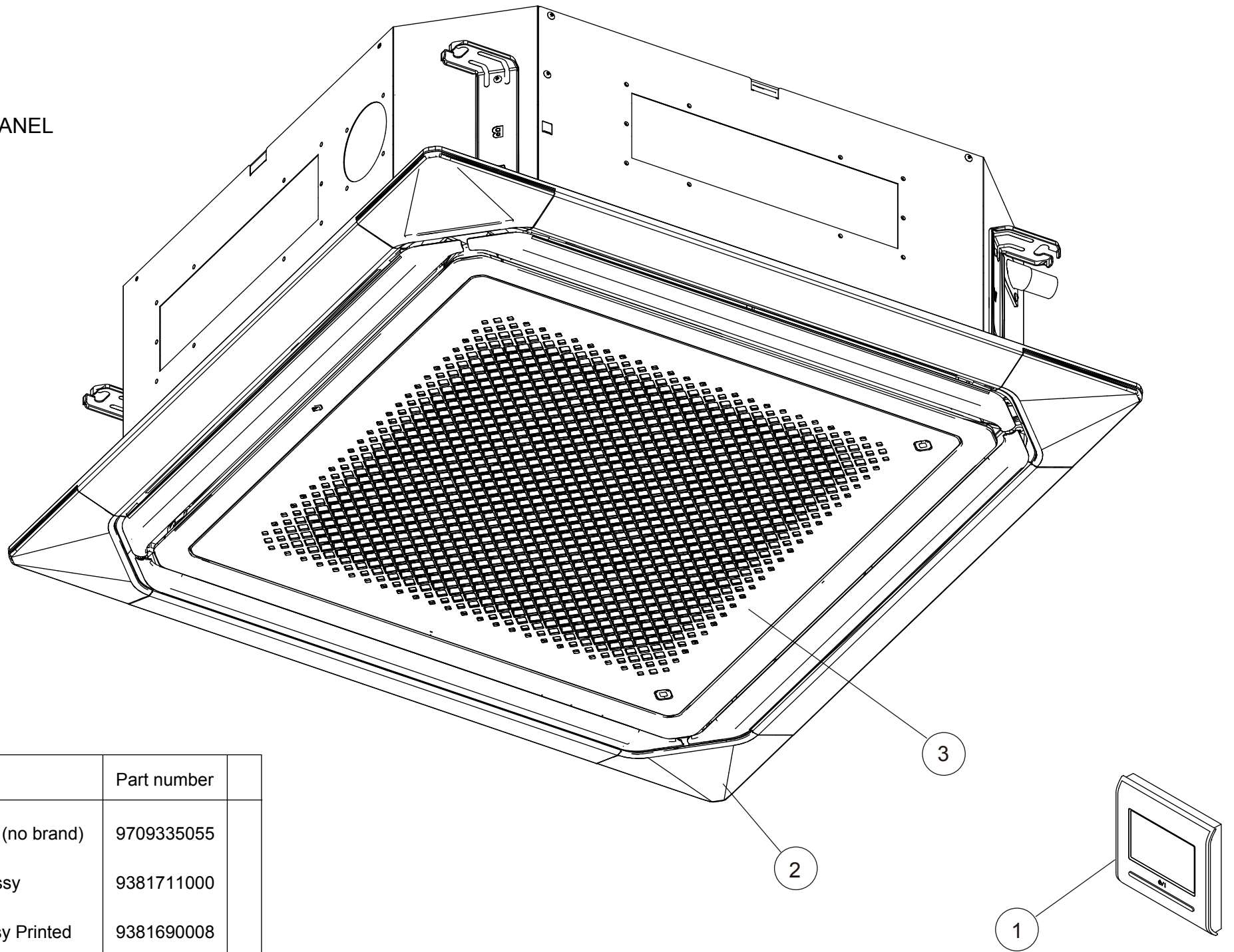
Display mode ● : 0.5s ON / 0.5s OFF
 ◇ : 0.1s ON / 0.1s OFF
 () : Number of flashing

Error display			Wired remote controller Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote controller communication error
●(1)	●(5)	◇	15	Check run unfinished
●(1)	●(6)	◇	16	Peripheral unit transmission PCB connection error
●(1)	●(8)	◇	18	External communication error
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	• Connection unit number error (indoor secondary unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(6)	◇	26	Indoor unit address setting error
●(2)	●(7)	◇	27	Primary unit, secondary unit setup error [Simultaneous Multi]
●(2)	●(9)	◇	29	Connection unit number error in wired remote controller system
●(3)	●(1)	◇	31	Power supply interruption error
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(3)	●(10)	◇	3A	Indoor unit communication circuit (wired remote controller) error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(4)	●(4)	◇	44	Human sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(1)	◇	61	Outdoor unit reverse/missing phase and wiring error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error

Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error
●(6)	●(8)	◇	68	Outdoor unit rush current limiting resistor temp. rise error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection
●(9)	●(5)	◇	95	Compressor rotor position detection error (permanent stop)
●(9)	●(7)	◇	97	Outdoor unit fan motor 1 error
●(9)	●(8)	◇	98	Outdoor unit fan motor 2 error
●(9)	●(9)	◇	99	4-way valve error
●(9)	●(10)	◇	9A	Coil (expansion valve) error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	J2	Branch boxes error [Flexible Multi]

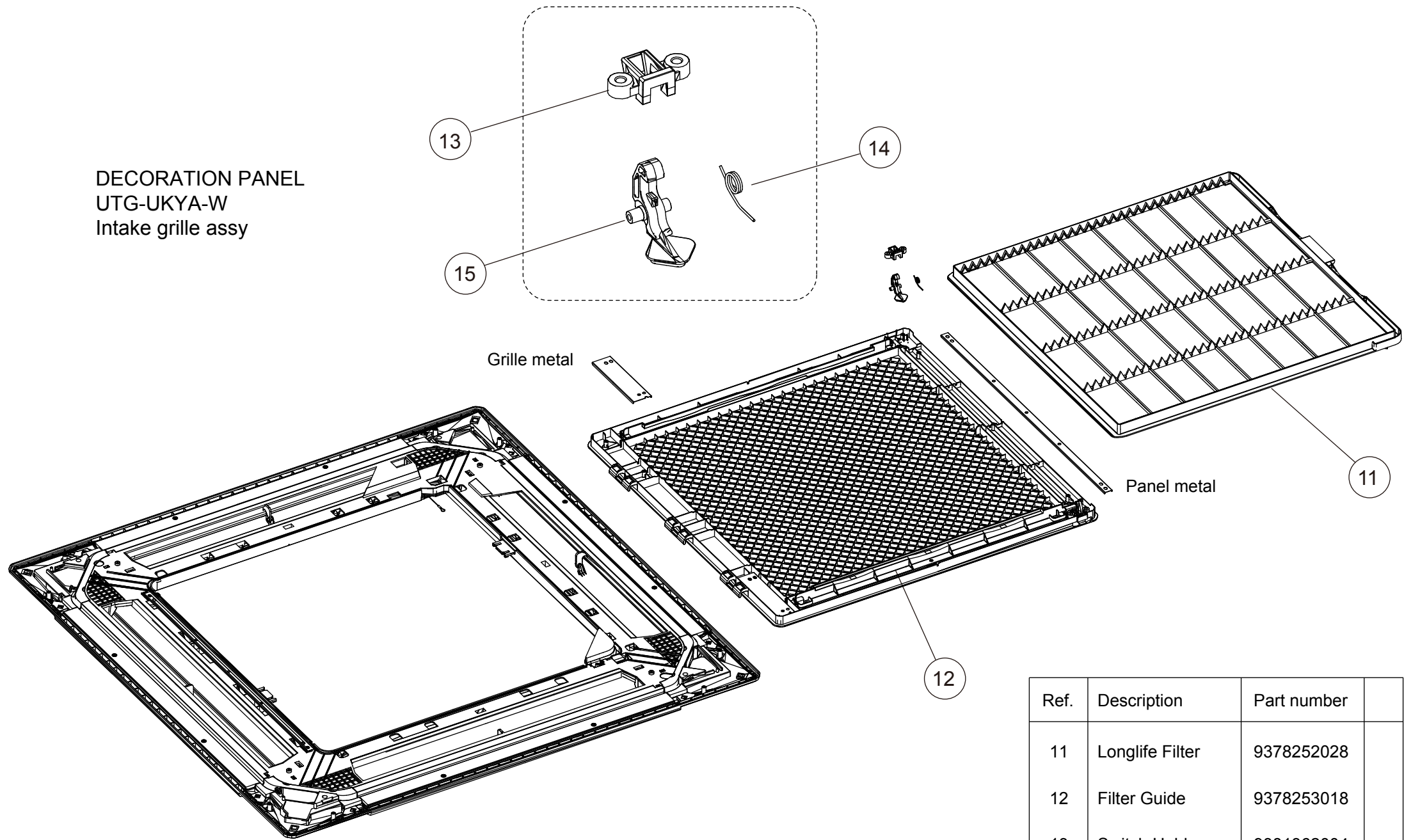
PARTS

DECORATION PANEL
UTG-UKYA-W

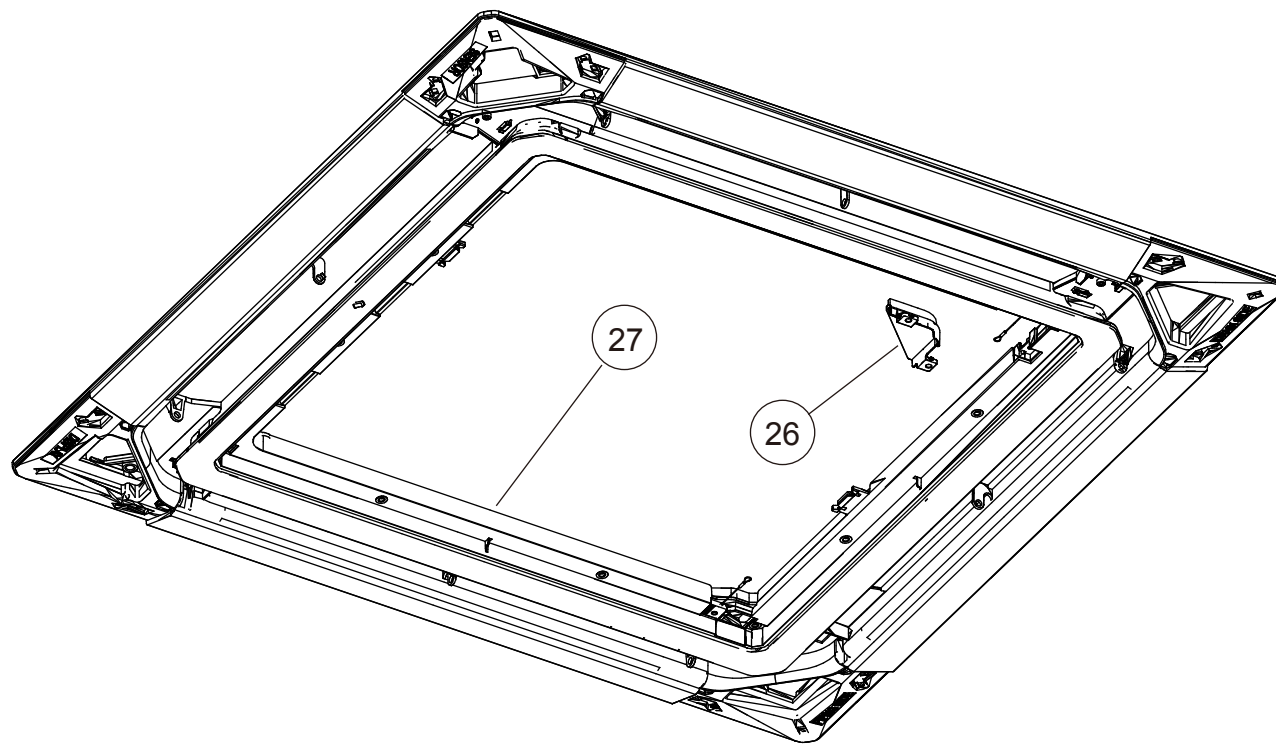


Ref.	Description	Part number	
1	Remote Control (no brand)	9709335055	
2	Corner Panel Assy	9381711000	
3	Intake Grille Assy Printed	9381690008	

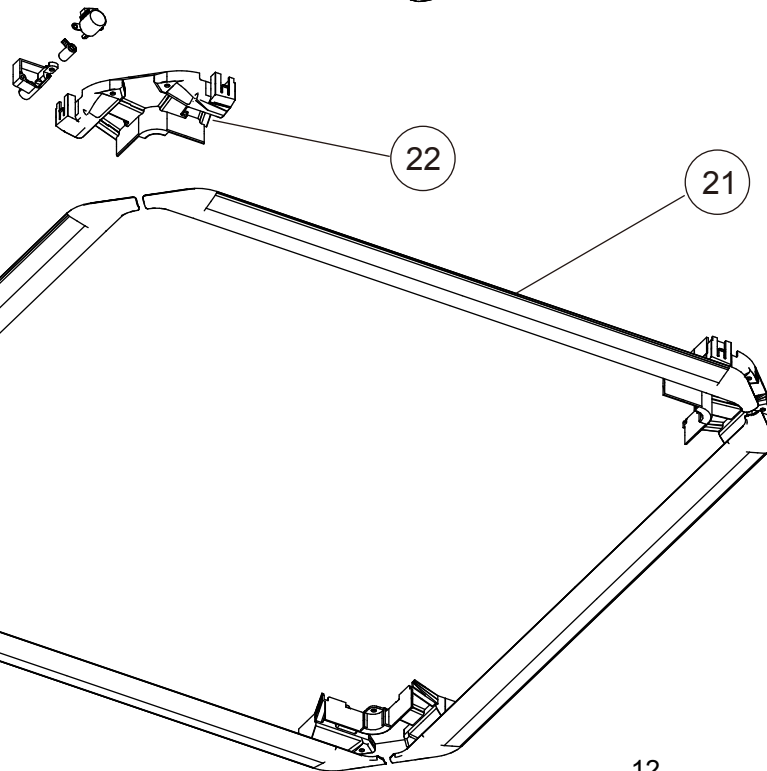
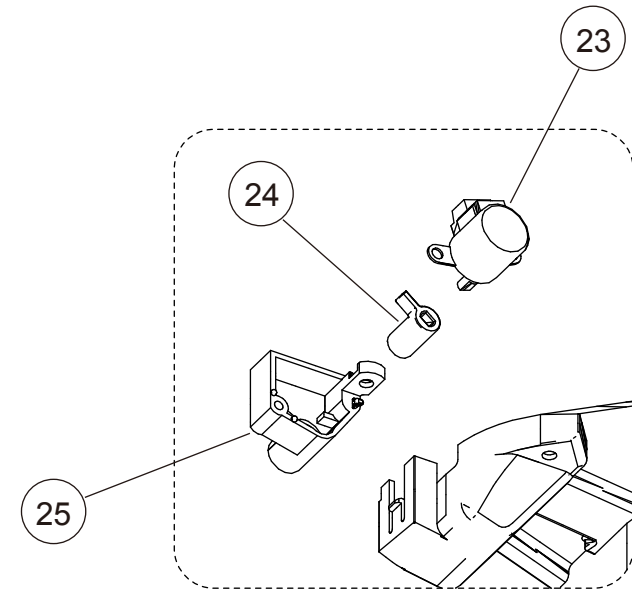
DECORATION PANEL
 UTG-UKYA-W
 Intake grille assy



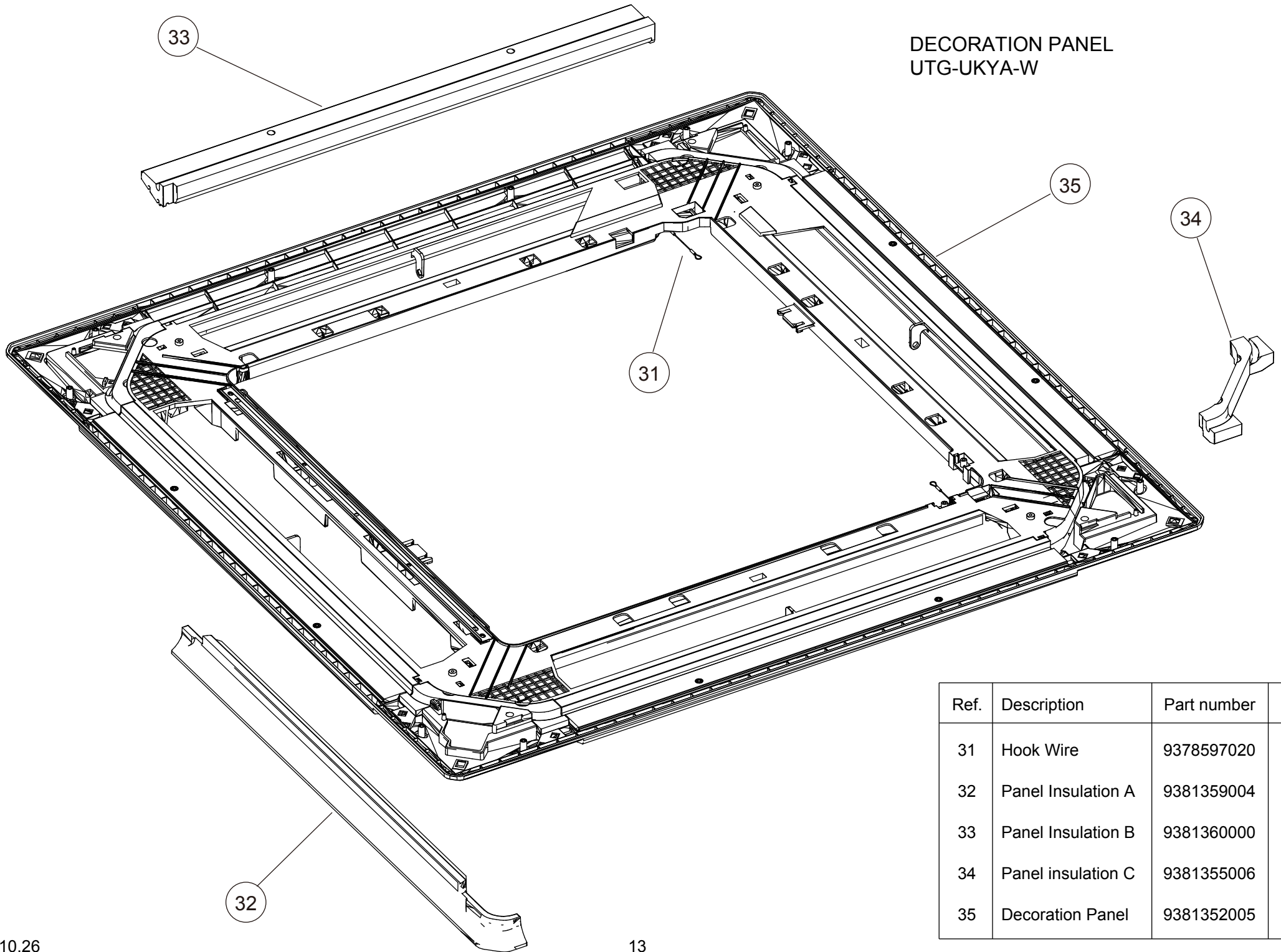
Ref.	Description	Part number	
11	Longlife Filter	9378252028	
12	Filter Guide	9378253018	
13	Switch Holder	9381362004	
14	Switch Spring	9381688005	
15	Switch	9381363001	



DECORATION PANEL
UTG-UKYA-W



Ref.	Description	Part number
21	Louver Assy	9381693009
22	Motor Cover	9381354009
23	Step Motor	9900885007
24	Shaft Cover	9381357000
25	Motor Case	9381356003
26	Drain Cover Assy	9381713004
27	Bezel	9381353002

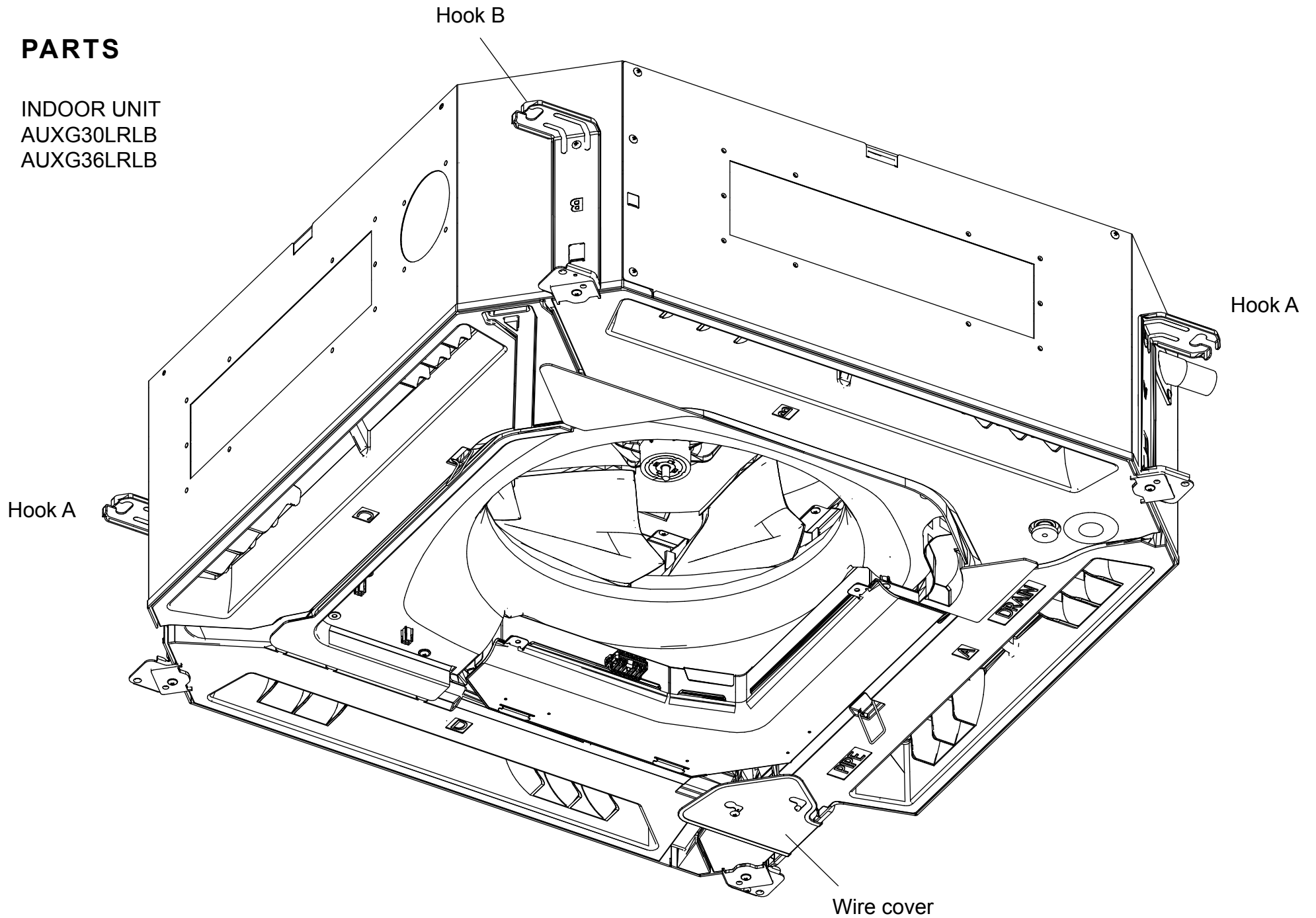


DECORATION PANEL
UTG-UKYA-W

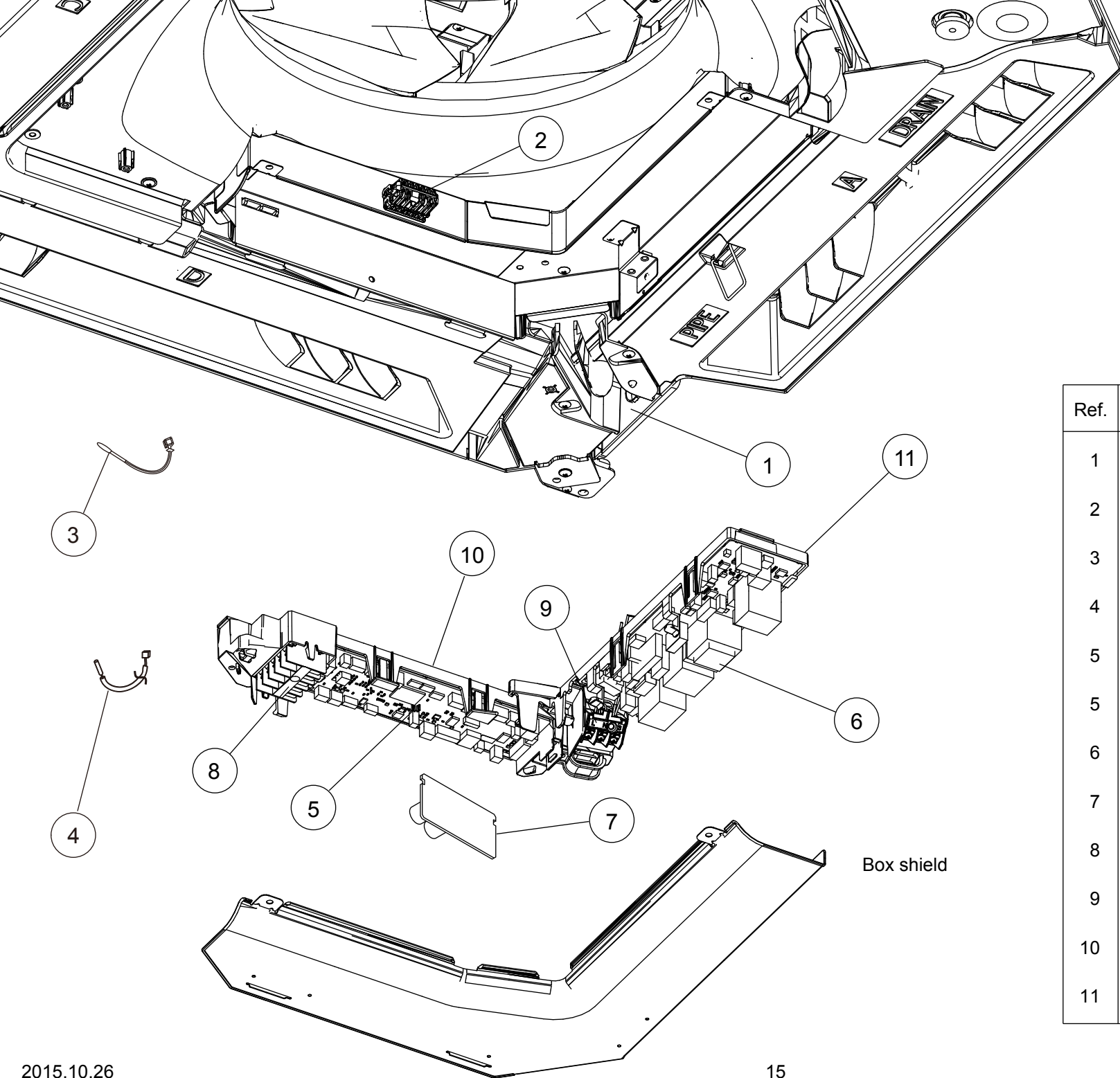
Ref.	Description	Part number
31	Hook Wire	9378597020
32	Panel Insulation A	9381359004
33	Panel Insulation B	9381360000
34	Panel insulation C	9381355006
35	Decoration Panel	9381352005

PARTS

INDOOR UNIT
AUXG30LRLB
AUXG36LRLB



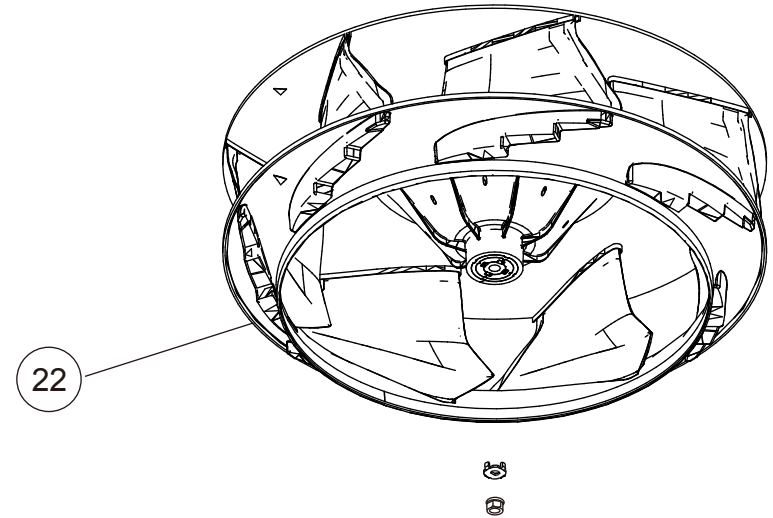
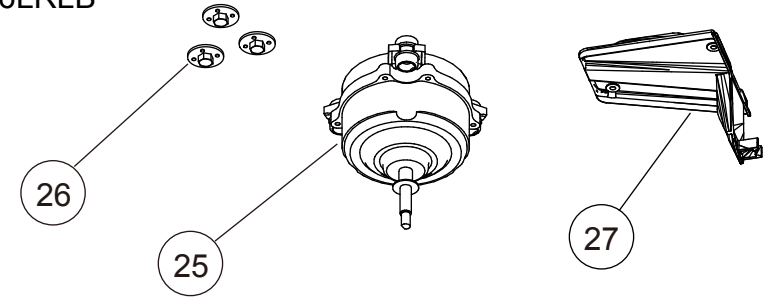
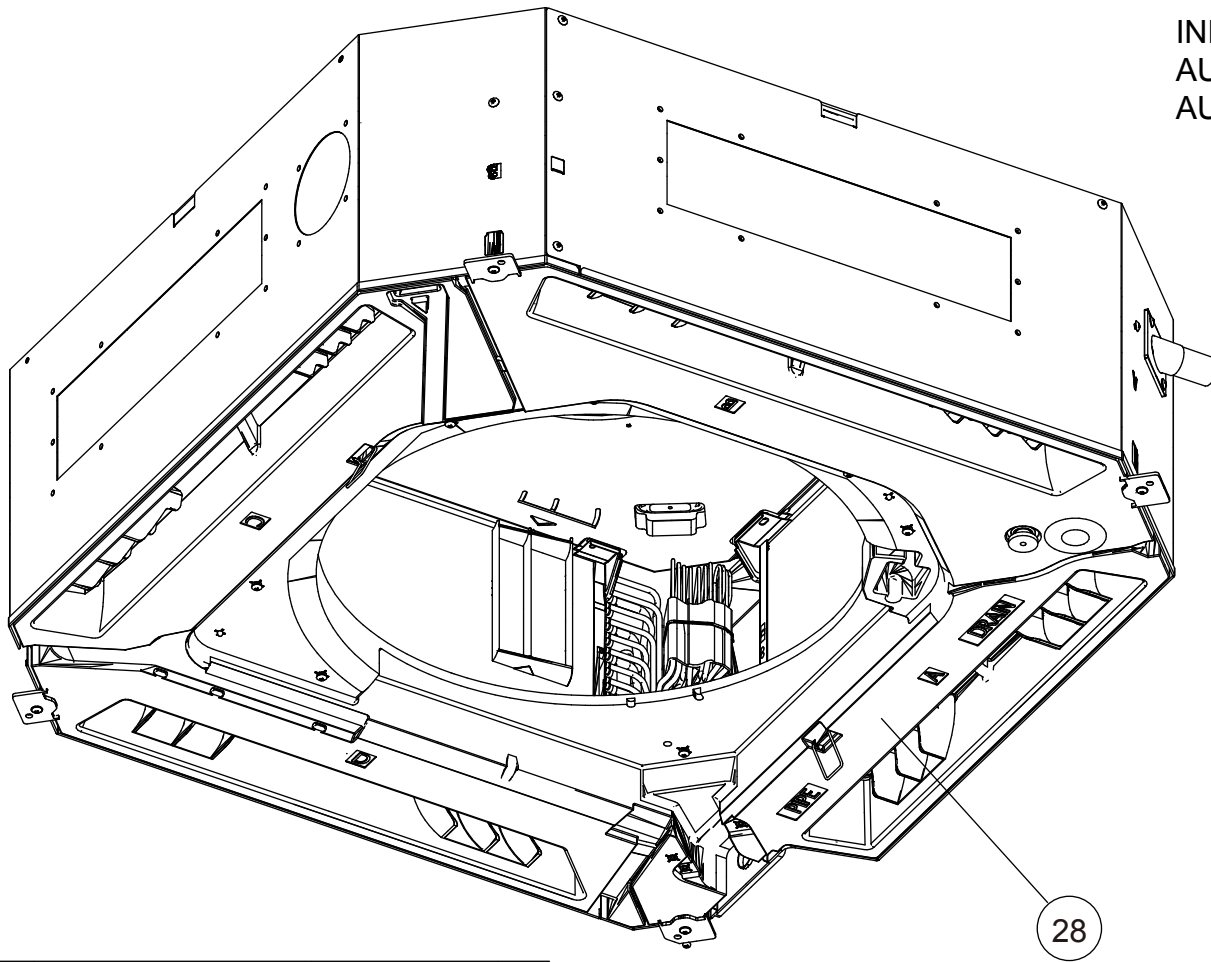
INDOOR UNIT
AUXG30LRLB
AUXG36LRLB



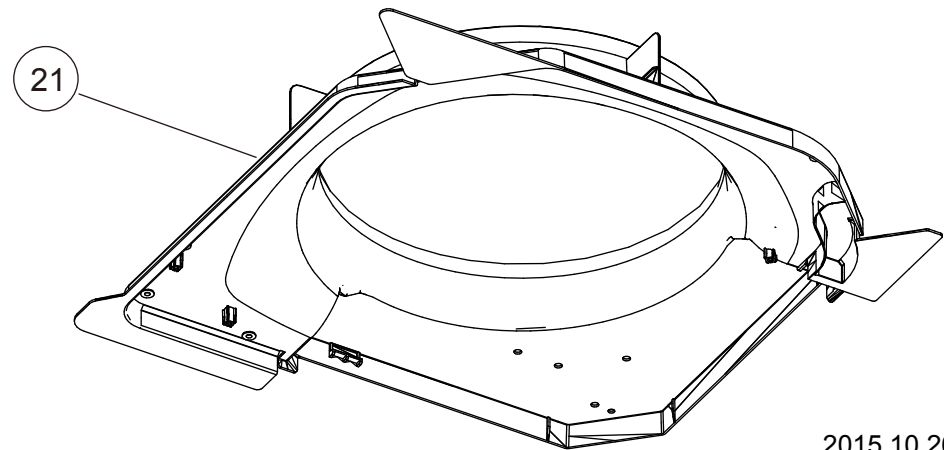
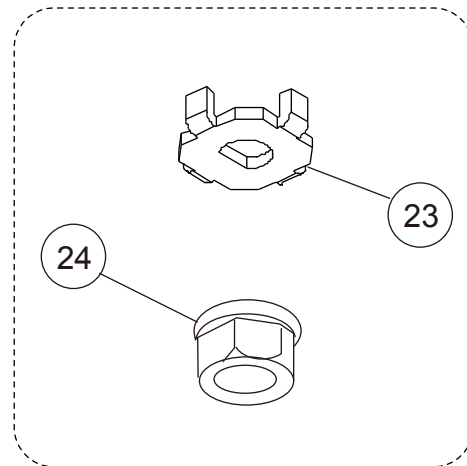
Ref.	Description	Part number
1	Cable Guide	9381376001
2	Room Thermistor Holder	9381348008
3	Room Thermistor	9900822002
4	Pipe Thermistor	9900903008
5	Main PCB (AUXG30LRLB)	9710016189
5	Main PCB (AUXG36LRLB)	9710016196
6	Power PCB	9710022005
7	PCB (Non-polar 2-wire)	9710019005
8	Remote Terminal 5P	9900896003
9	Power Terminal 3P	9900720032
10	Main PCB Holder	9381350001
11	Power PCB Holder	9381349005

Box shield

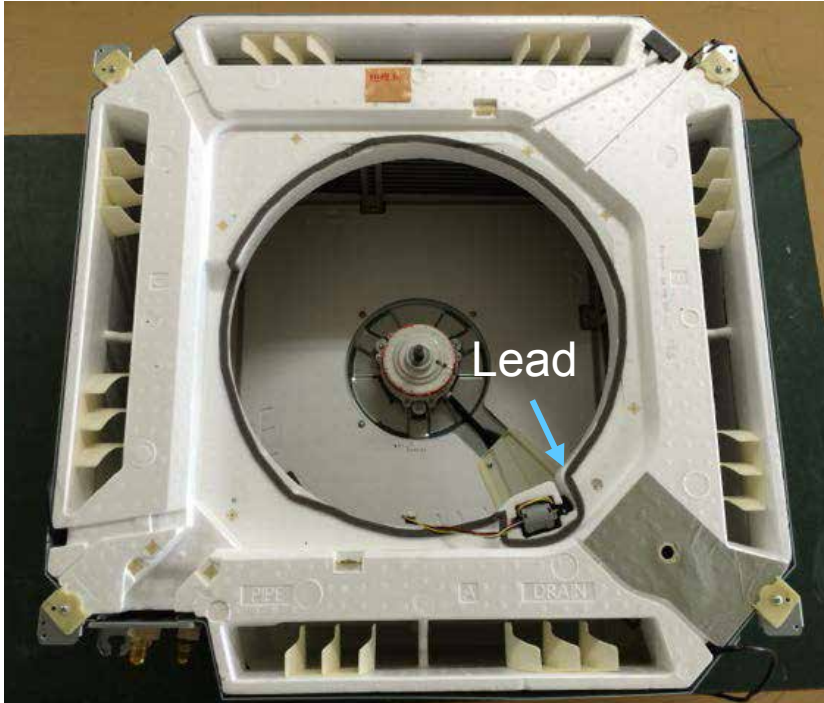
INDOOR UNIT
AUXG30LRLB
AUXG36LRLB



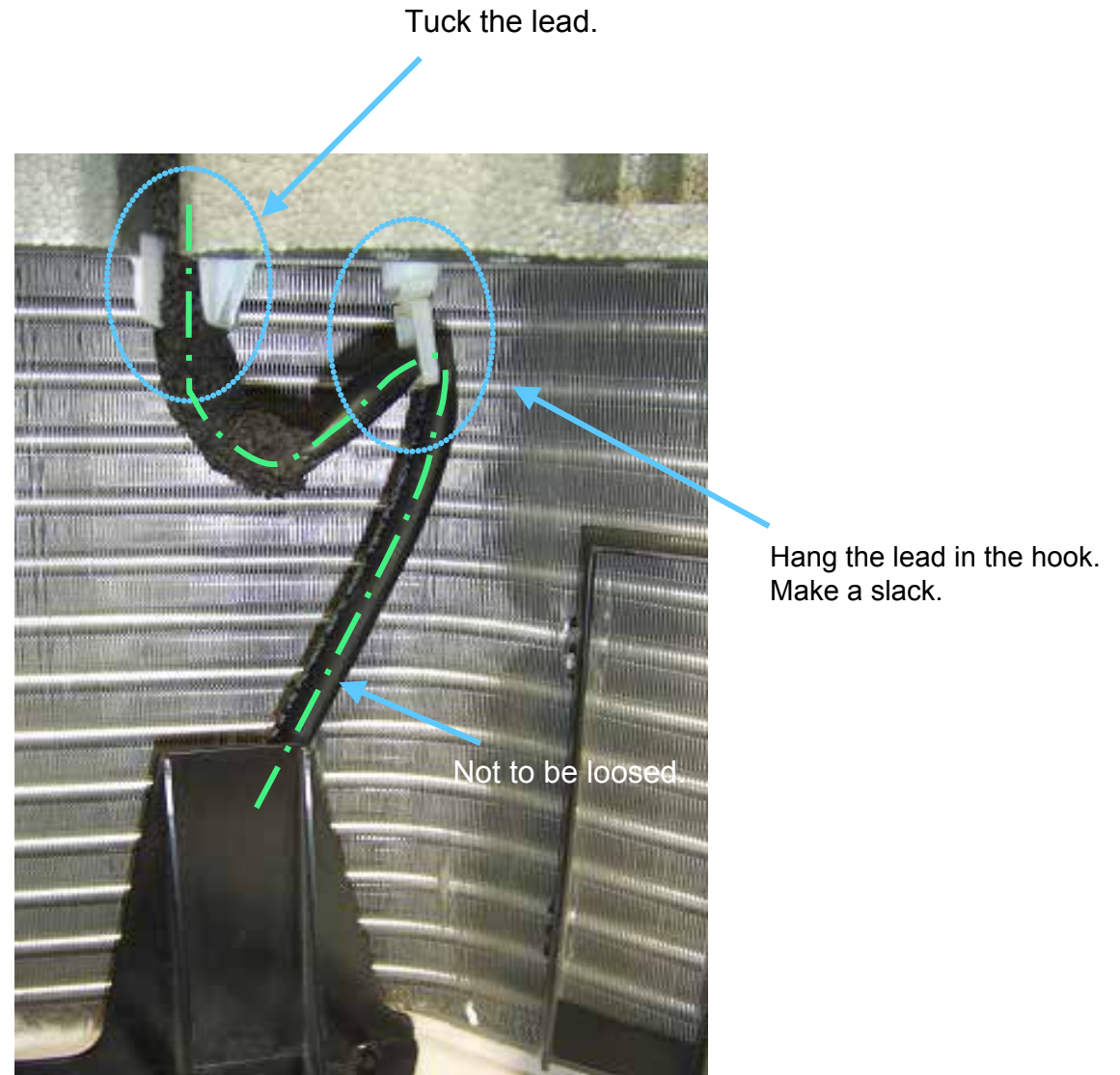
Ref.	Description	Part number
21	Bellmouth	9381345007
22	Turbo Fan Assy	9381303007
23	Turbo Fan Washer	9378394018
24	Nut	9356998009
25	Brushless Motor	9603443009
26	Special Nut	9378388017
27	Motor Wire Holder	9381351008
28	Drain Pan Sub Assy	9381789009



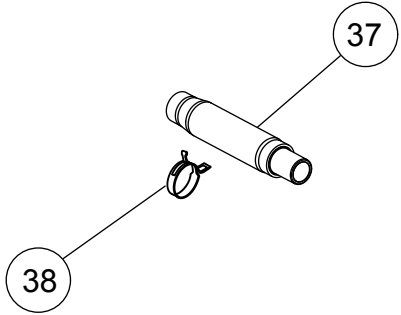
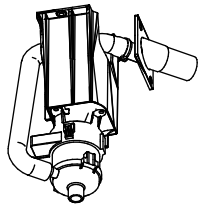
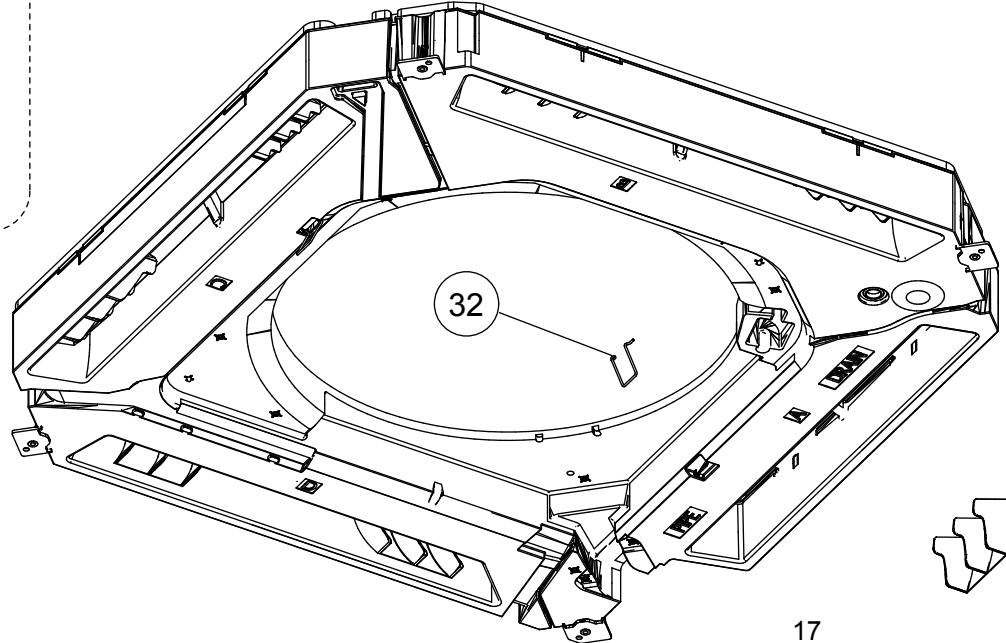
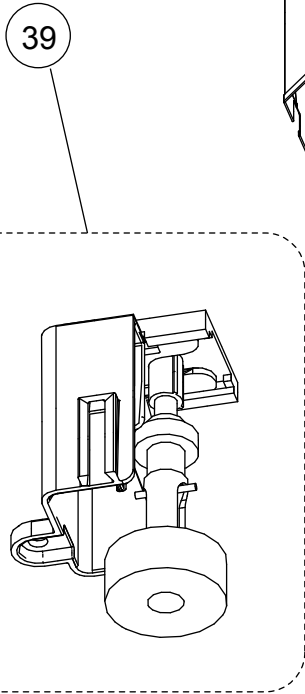
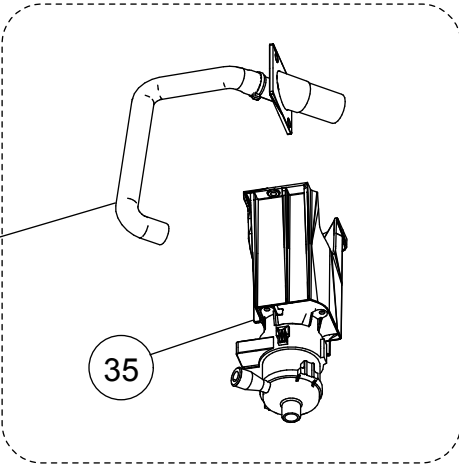
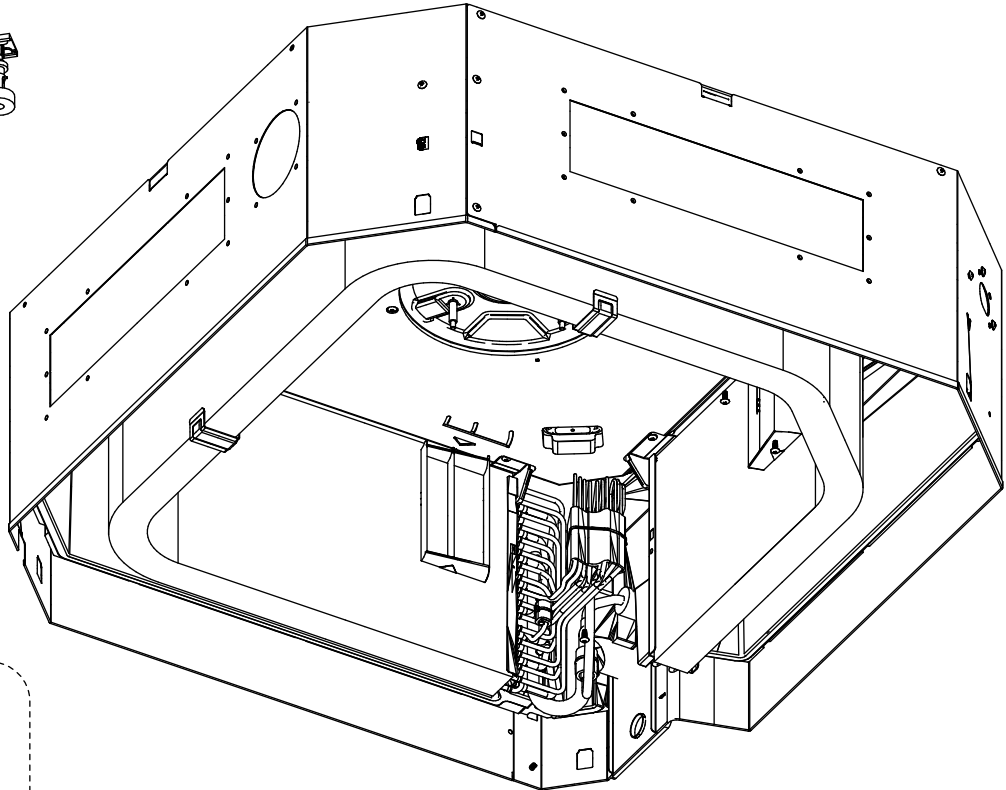
Drain pan



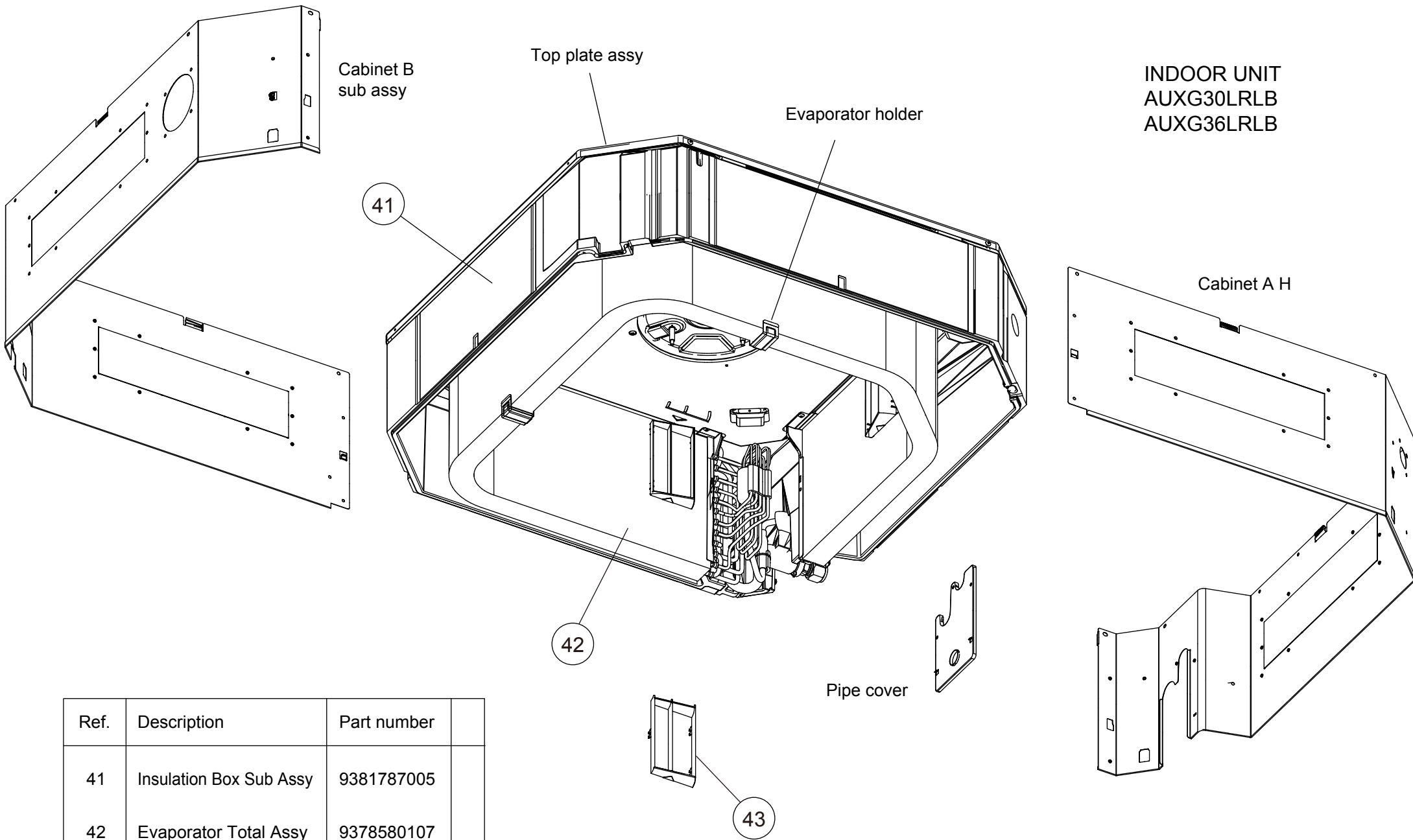
Hang the fan motor lead in the drain pan hooks.
(when it is maintained)



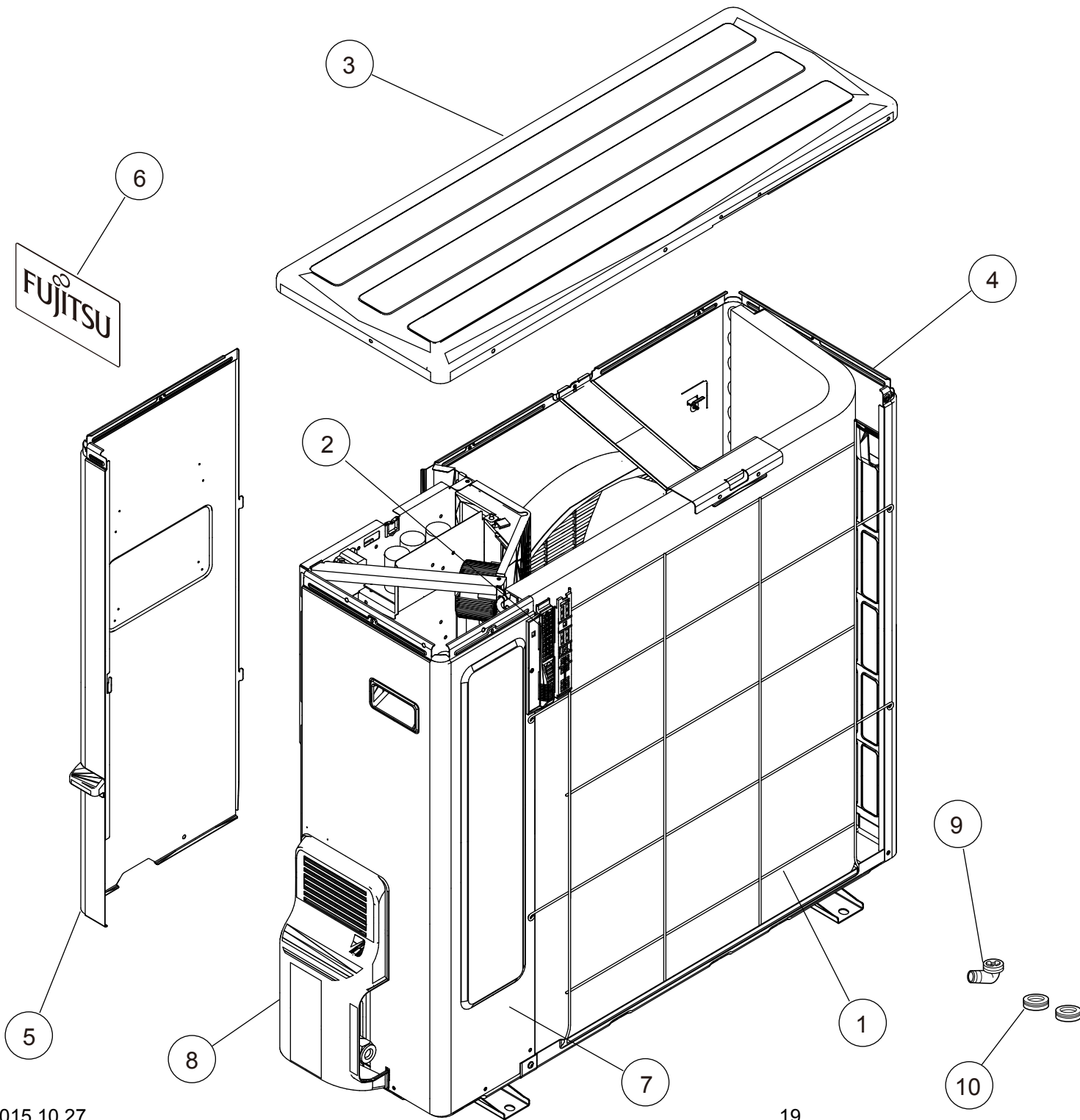
INDOOR UNIT
 AUXG30LRLB
 AUXG36LRLB



Ref.	Description	Part number
31	Drain Cap	9375502010
32	Panel Hook	9375671013
33	Vane L	9381745012
34	Vane R	9381744008
35	Drain Pump Sub Assy	9381793006
36	Drain Port Sub Assy	9381788002
37	Drain Hose	9379665001
38	Hose Band	9379757010
39	Float Switch Sub Assy	9381794003



Ref.	Description	Part number	
41	Insulation Box Sub Assy	9381787005	
42	Evaporator Total Assy	9378580107	
43	Wind Guide Board	9382125004	



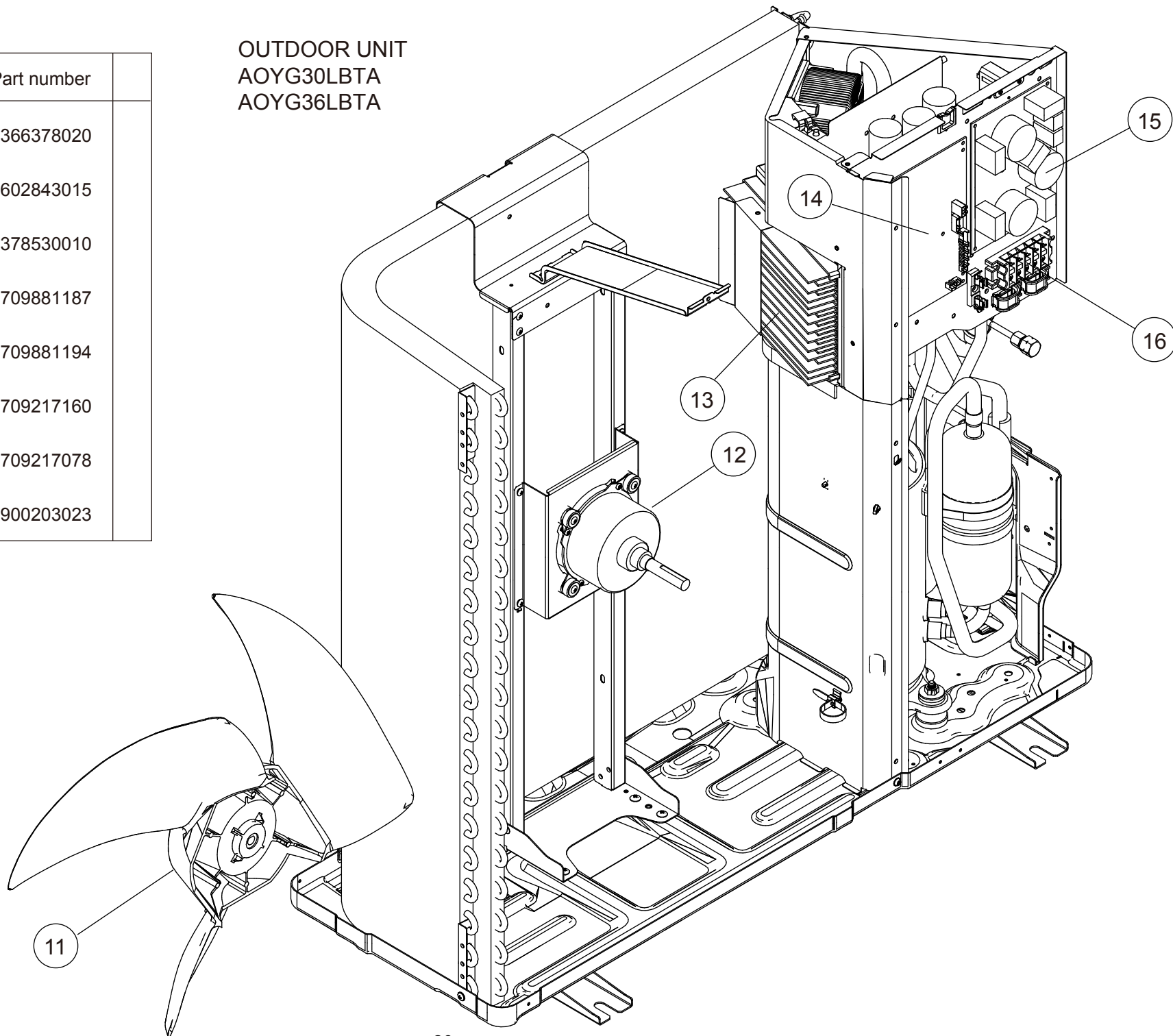
PARTS

OUTDOOR UNIT
 AOYG30LBTA
 AOYG36LBTA

Ref.	Description	Part number
1	Protective Net	9375381011
2	Thermo Holder	9375211011
3	Top Panel Sub Assy	9374417032
4	Front Panel Sub Assy	9374414079
5	Service Panel Sub Assy	9374415052
6	Emblem Rear	9351355005
7	Right Panel Sub Assy	9374416127
8	Valve Cover	9374174010
9	Drain Assy	9303029015
10	Drain Cap	313166024302

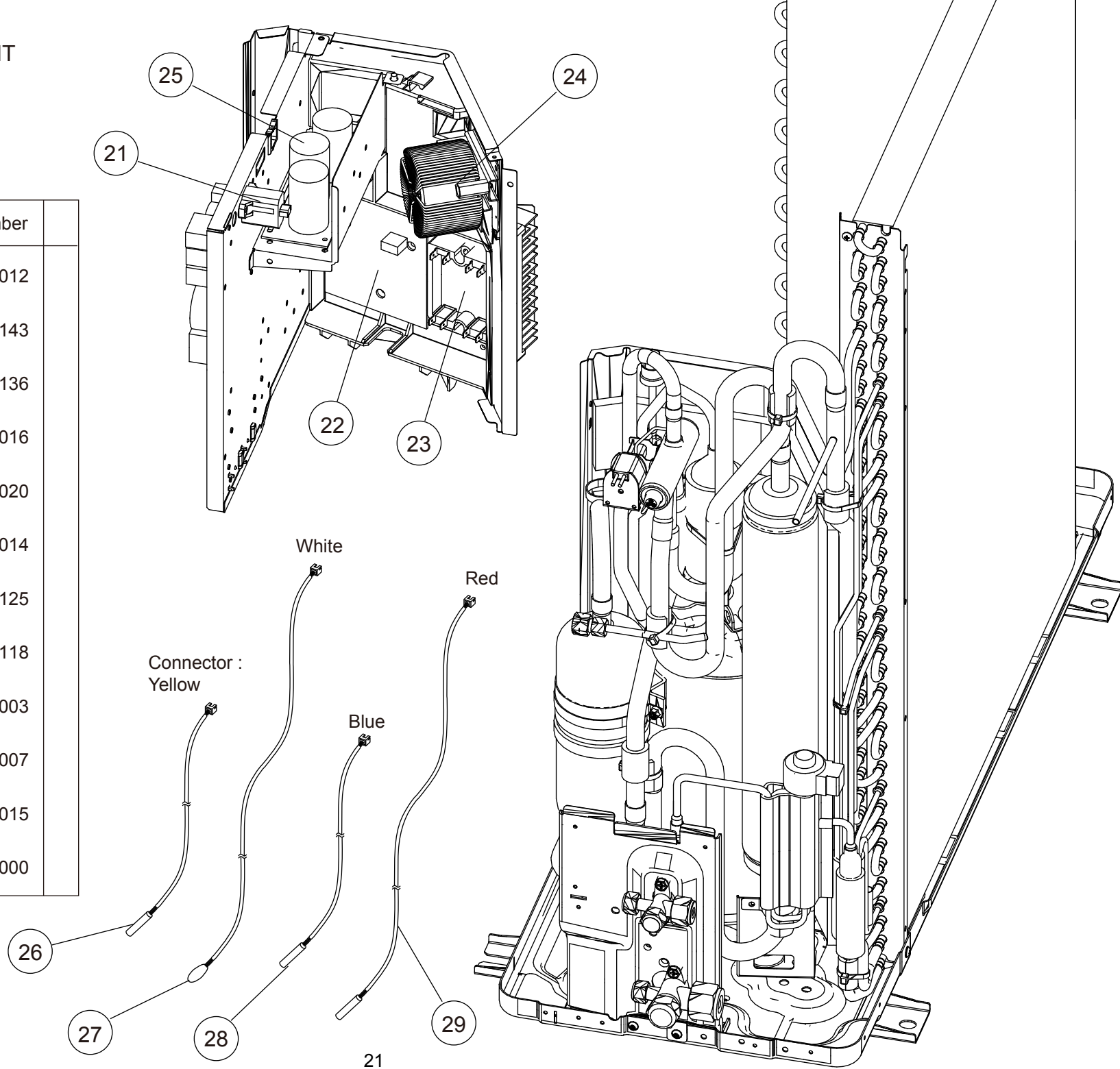
Ref.	Description	Part number
11	Propeller Fan Assy	9366378020
12	Fan Motor	9602843015
13	Heatsink	9378530010
14	Main PCB (30LBTA)	9709881187
14	Main PCB (36LBTA)	9709881194
15	Filter PCB (30LBTA)	9709217160
15	Filter PCB (36LBTA)	9709217078
16	Terminal 5P	9900203023

OUTDOOR UNIT
AOYG30LBTA
AOYG36LBTA

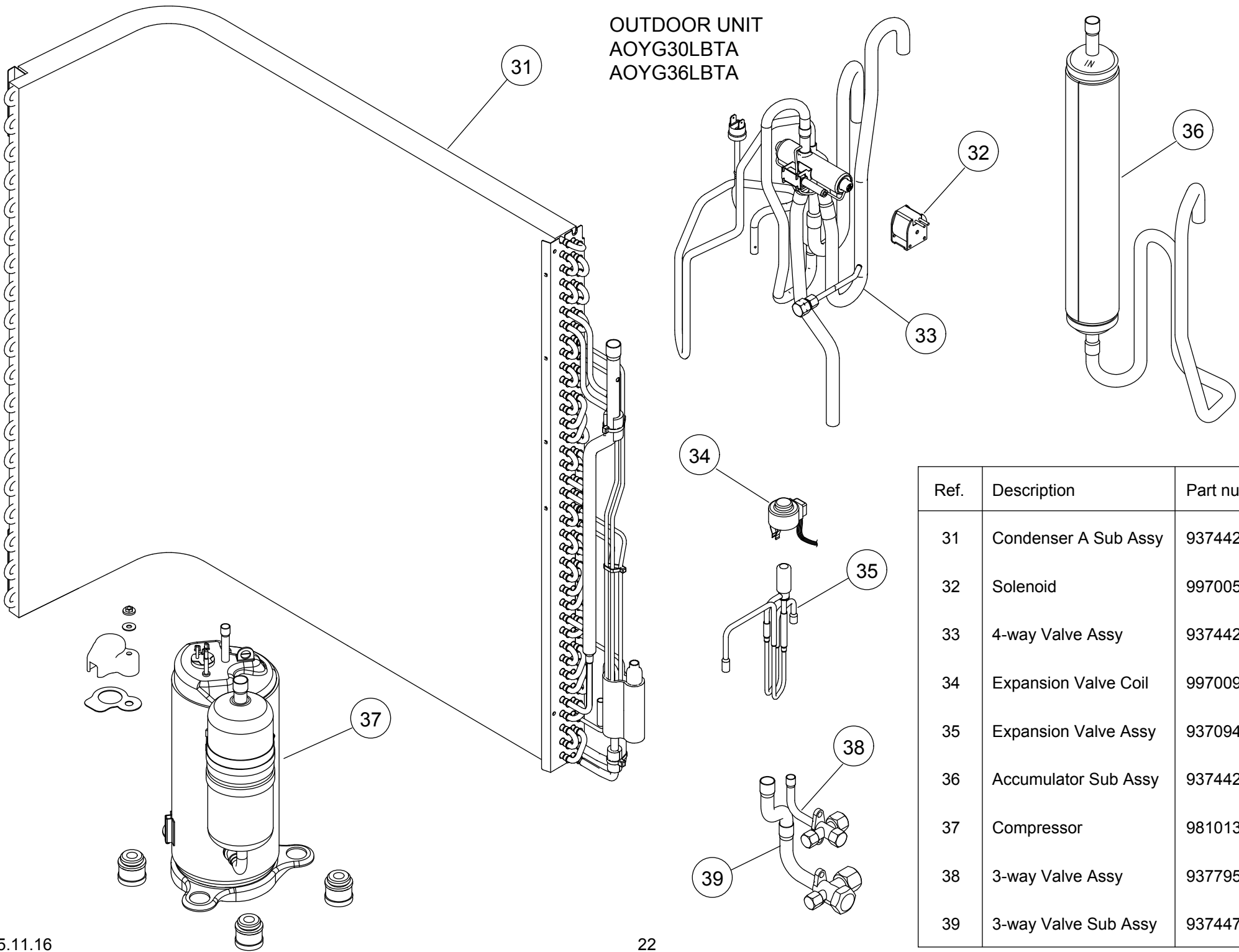


OUTDOOR UNIT
AOYG30LBTA
AOYG36LBTA

Ref.	Description	Part number
21	PFC Thermistor (36 only)	9704265012
22	Transistor PCB (30)	9708512143
22	Transistor PCB (36)	9708512136
23	ACTPM	9707592016
24	Choke Coil (30LBTA)	9900390020
24	Choke Coil (36LBTA)	9900223014
25	Capacitor PCB (30)	9709894125
25	Capacitor PCB (36)	9709894118
26	Discharge Thermistor	9900461003
27	Thermistor (Outdoor)	9900463007
28	Compressor Thermistor	9900466015
29	Heat Exchanger Thermistor	9900462000



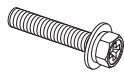

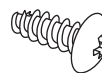
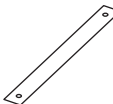
OUTDOOR UNIT
AOYG30LBTA
AOYG36LBTA




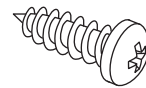

Ref.	Description	Part number
31	Condenser A Sub Assy	9374420308
32	Solenoid	9970055034
33	4-way Valve Assy	9374425198
34	Expansion Valve Coil	9970095030
35	Expansion Valve Assy	9370947144
36	Accumulator Sub Assy	9374426133
37	Compressor	9810135001
38	3-way Valve Assy	9377958013
39	3-way Valve Sub Assy	9374470044

ACCESSORIES

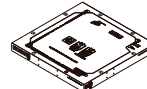

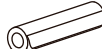

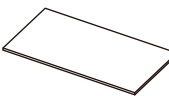
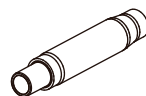




DECORATION PANEL UTG-UKYA-W

Name and shape	Q'ty	Description
Hexagon Screw 	4	For mounting decoration panel
Washer 	4	For mounting decoration panel
Tapping screw 	2	For installing grille holding wire
Strap 	4	For installing corner panel

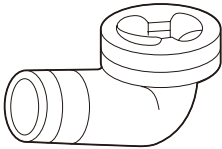
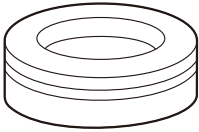
WIRED REMOTE CONTROL

Name and shape	Q'ty	Name and shape	Q'ty
Wired remote control 	1	Screw (M4 × 16mm)  For installing the remote control	2
		Cable tie  For remote control and remote control cable binding	1

INDOOR UNIT AUXG30LRLB AUXG36LRLB

Name and Shape	Q'ty	Description
Template (Carton top) 	1	For installing indoor unit
Washer 	8	For installing indoor unit
Coupler heat insulation (Large) 	1	For indoor side pipe joint (Gas pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Liquid pipe)
Insulation 	1	For installing drain pipe
Drain hose 	1	For installing drain pipe VP25 (O.D.32, I.D.25)
Hose Band 	1	For installing drain hose
Drain hose heat insulation 	1	For installing drain pipe
Cable tie (Large) 	4	For fixing the connection pipe
Cable tie (Small) 	2	For electrical wiring

OUTDOOR UNIT

Name and shape	Q'ty	Description
Drain pipe 	1	For outdoor unit drain piping work
Drain cap 	2	

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