

SPLIT TYPE
AIR CONDITIONER
CASSETTE TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
AUYA30LBLU	AOYA30LBTL
AUYA36LBLU	AOYA36LBTL

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cooling & Heating	
INDOOR UNIT		AUYA30LBLU	AUYA36LBLU
OUTDOOR UNIT		AOYA30LBTL	AOYA36LBTL
COOLING CAPACITY		8.5 kW	10.0 kW
HEATING CAPACITY		10.0 kW	11.2 kW
POWER SOURCE		230 V 50 Hz	230 V 50 Hz
RUNNING CURRENT	Cooling	11.6 A	13.7 A
	Heating	12.1 A	13.3 A
INPUT WATTS	Cooling	2.65 kW	3.11 kW
	Heating	2.77 kW	3.02 kW
E.E.R.	Cooling	3.21 kW/kW	3.21 kW/kW
	Heating	3.61 kW/kW	3.71 kW/kW
STARTING CURRENT		15 A	15 A
MOISTURE REMOVAL		2.5 L/hr	3.0 L/hr
AIRCIRCULATION INDOOR		1,600 m3/hr	1,800 m3/hr
AIRCIRCULATION OUTDOOR		3,600 m3/hr	4,000 m3/hr
MAXIMUM CURRENT		17.0 A	20.0 A

FAN SPEED

INDOOR UNIT	Discrimination	MFF-54TVM	MFF-54TVM
	High speed	570 r.p.m.	640 r.p.m.
	Med speed	510 r.p.m.	510 r.p.m.
	Low speed	470 r.p.m.	470 r.p.m.
	Quiet speed	420 r.p.m.	420 r.p.m.
OUTDOOR UNIT	Discrimination	MFE-36TV	MFE-36TV
	Speed	850 r.p.m.	950 r.p.m.

NOISE LEVEL

INDOOR UNIT	High speed	40 dB	43 dB
	Med speed	38 dB	38 dB
	Low speed	36 dB	36 dB
	Quiet speed	32 dB	32 dB
OUTDOOR UNIT	Cooling	53 dB	54 dB
	Heating	55 dB	55 dB

DIMENSIONS

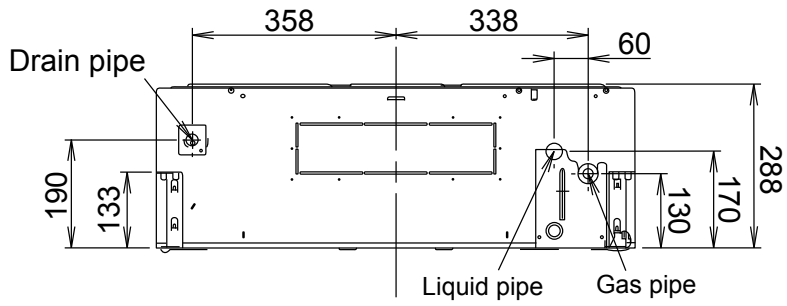
INDOOR UNIT	H x W x D	288 x 840 x 840 mm
DECORATION PANEL	H x W x D	50 x 950 x 950 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm

WEIGHT

INDOOR UNIT	Gross / Net	32 kg / 26 kg
DECORATION PANEL	Gross / Net	9 kg / 5.5 kg
OUTDOOR UNIT	Gross / Net	70 kg / 62 kg

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, Inverter, 4 poles, 3 phase, DC motor, Twin Rotary		
DISCRIMINATION	5KD240XAD21		
WEIGHT (with oil)	16.3 kg		
STANDARD REFRIGERANT	2,100 g		
REFRIGERANT TYPE	R410A		
MAX PIPE LENGTH	50 m		
MAX PIPE HEIGHT	30 m		
FULL CHARGE	Pipe 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		

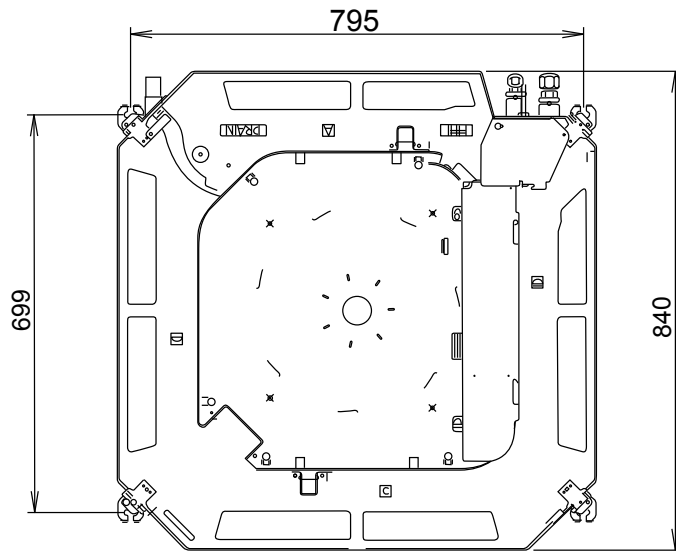


Side view

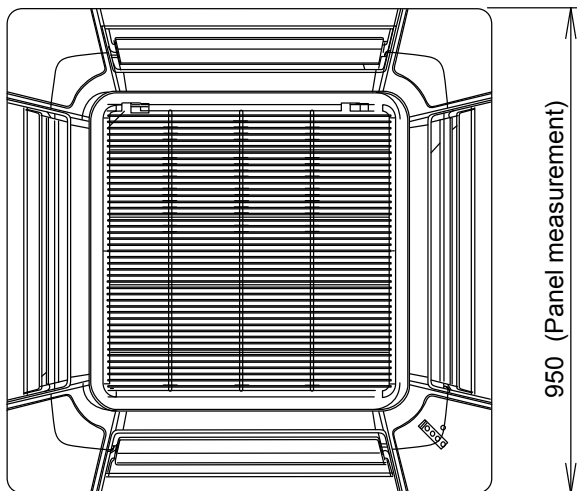
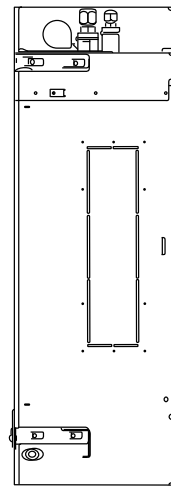
DIMENSIONS

INDOOR UNIT
DECORATION PANEL
(Unit : mm)

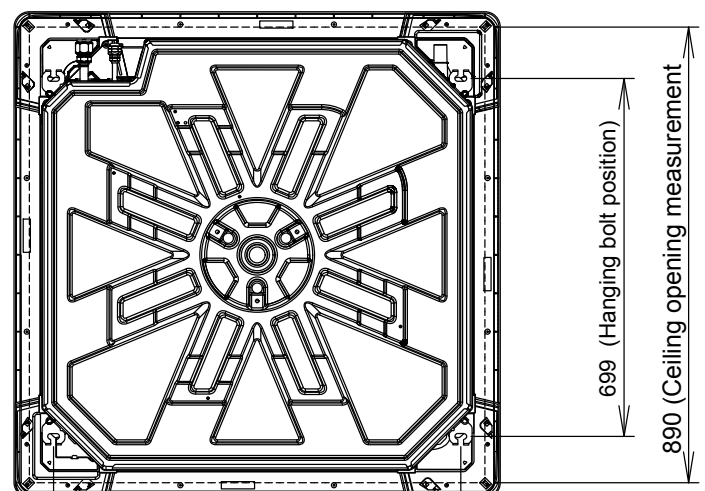
Drain pipe diameter
Inside : 20 mm
Outside : 26 mm



Bottom view



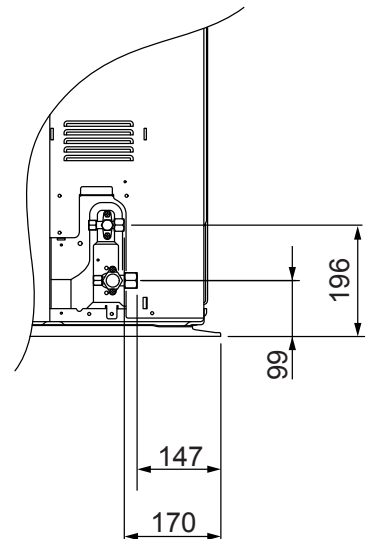
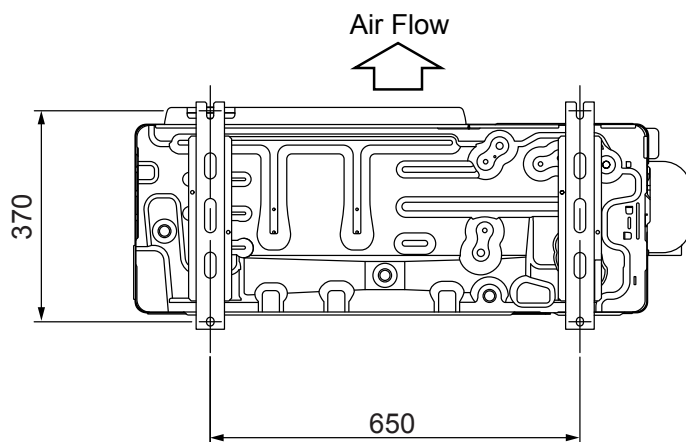
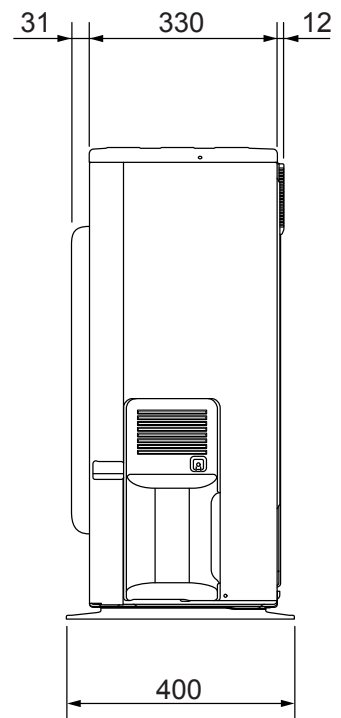
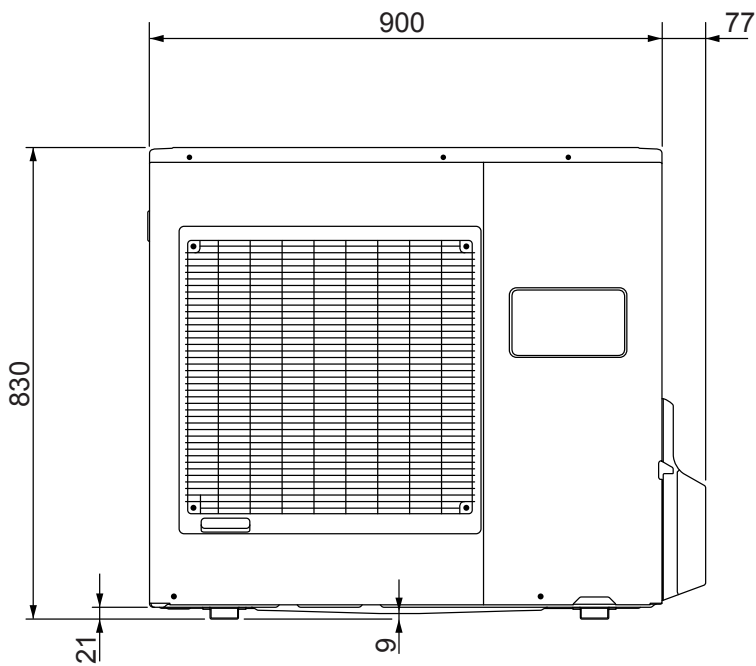
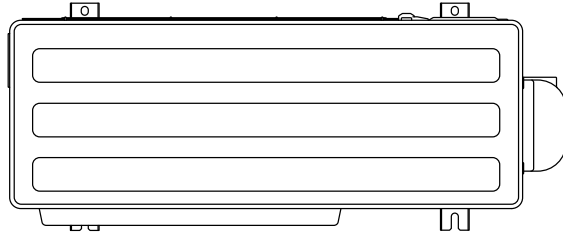
Bottom view



Top view

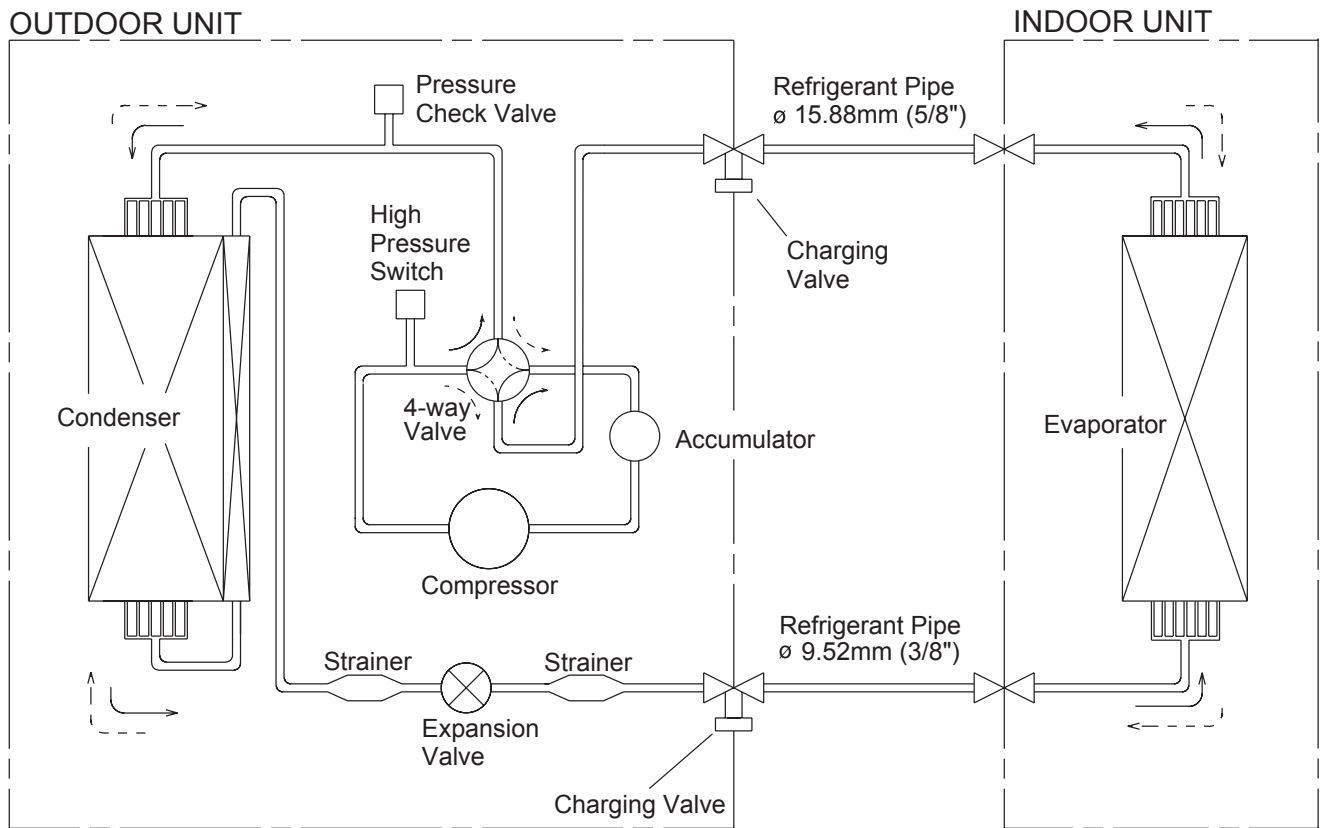
OUTDOOR UNIT

(Unit : mm)



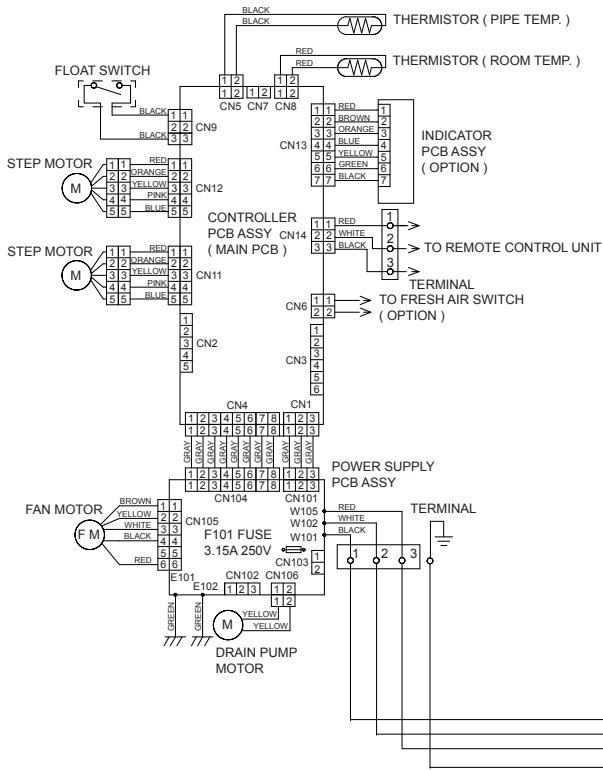
REFRIGERANT SYSTEM DIAGRAM

Refrigerant direction
 —> : Cool
 - - -> : Heat

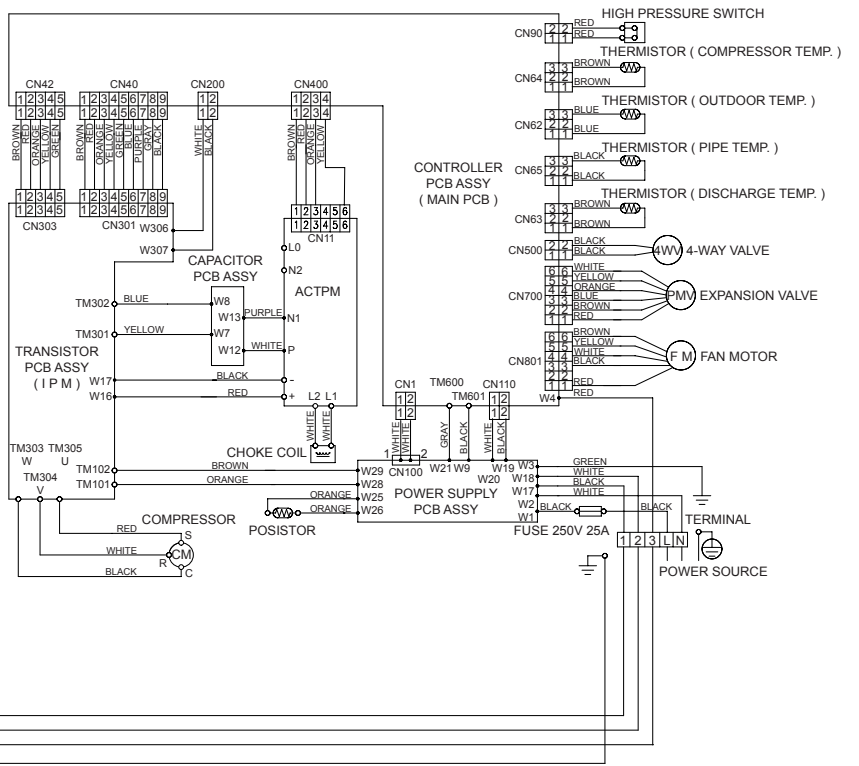


CIRCUIT DIAGRAM

INDOOR UNIT



OUTDOOR UNIT



PCB Circuit Diagrams

not available at time of publication

ERROR CONTENTS

TROUBLESHOOTING AT A REMOTE CONTROL LCD

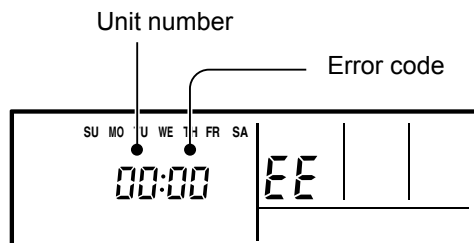
You will find this on a wired remote control LCD. (option)

If an error occurs, the following display will be shown.

("EE" will appear in the set room temperature display.)

If "CO" appears in the unit number display, there is a remote control error.

Refer to the installation instruction sheet included with the remote control.



Error code	Error contents
01	Serial reverse transfer error
13	Serial forward transfer error
26	Communication error (Main PCB → Display PCB)
27	Communication error (Display PCB → Main PCB)
00	Wired remote controller abnormal
02	Indoor room temperature sensor error
04	Indoor heat exchanger temperature sensor (middle) error
28	Indoor heat exchanger temperature sensor (inlet) error
09	Float switch operated
0C	Outdoor discharge pipe temperature sensor error
06	Outdoor heat exchanger temperature sensor (outlet) error
0A	Outdoor temperature sensor error
15	Compressor temperature sensor error
1d	2-way valve temperature sensor error
1E	3-way valve temperature sensor error
29	Outdoor heat exchanger temperature sensor (middle) error
20	Indoor manual auto switch abnormal
2A	Power supply frequency detection error
17	IPM protection
18	CT error
1A	Compressor location error
1b	Outdoor fan error
1F	Connected indoor unit abnormal
1c	Outdoor unit computer communication error
12	Indoor fan abnormal
0F	Discharge temperature error
24	Excessive high pressure protection on cooling
2c	4-way valve abnormal
16	Pressure switch abnormal
2b	Compressor temperature error
19	Active filter abnormal
25	PFC circuit error

OUTDOOR UNIT

CAUTION

Always turn on the power 12 hours prior to the start of the operation in order to ensure compressor protection

1. Make a TEST RUN in accordance with the installation instruction sheet for the indoor unit.

2. OUTDOOR UNIT LEDS

When a malfunction occurs in the outdoor unit, the LED on the circuit board lights to indicate the error. Refer to the following table for the description of each error according to the LED.

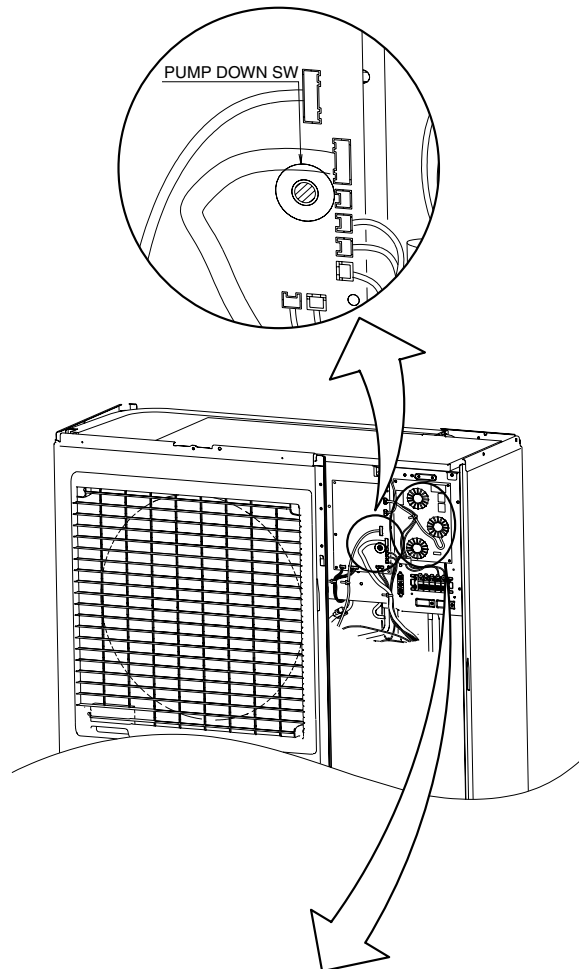
LED	ERROR CONTENTS
FLASH (0.1sec ON/0.1sec OFF)	Temperature sensor error
FLASH (0.5sec ON/0.5sec OFF)	IPM protection
FLASH (2sec ON/2sec OFF)	Current trans. error
FLASH (5sec ON/5sec OFF)	Outdoor fan error
FLASH (0.1sec ON/2sec OFF)	Compressor rotor position cannot be detected
FLASH (5sec ON/0.1sec OFF)	ACTPM error
Lighting	Overheat discharge temperature protection

SPECIAL INSTALLATION SETTING

PUMP DOWN (Refrigerant collecting operation)

Perform the following procedures to collect the refrigerant when moving the indoor unit or the outdoor unit.

- (1) Press the push-button switch on the circuit board once.
The LED on the circuit board starts flashing (one second ON/one second OFF). This indicates the start of PUMP DOWN operation.
When the switch is pressed while the compressor is in operation, PUMP DOWN operation starts automatically.
When the switch is pressed while the compressor is in stop, the compressor starts to operate automatically, and then move on to PUMP DOWN operation.
- (2) PUMP DOWN operation continues for about 1 minute. When PUMP DOWN operation is completed, the compressor stops automatically. Then close the 2-way valve and 3-way valve immediately.
- (3) Turn the power off.

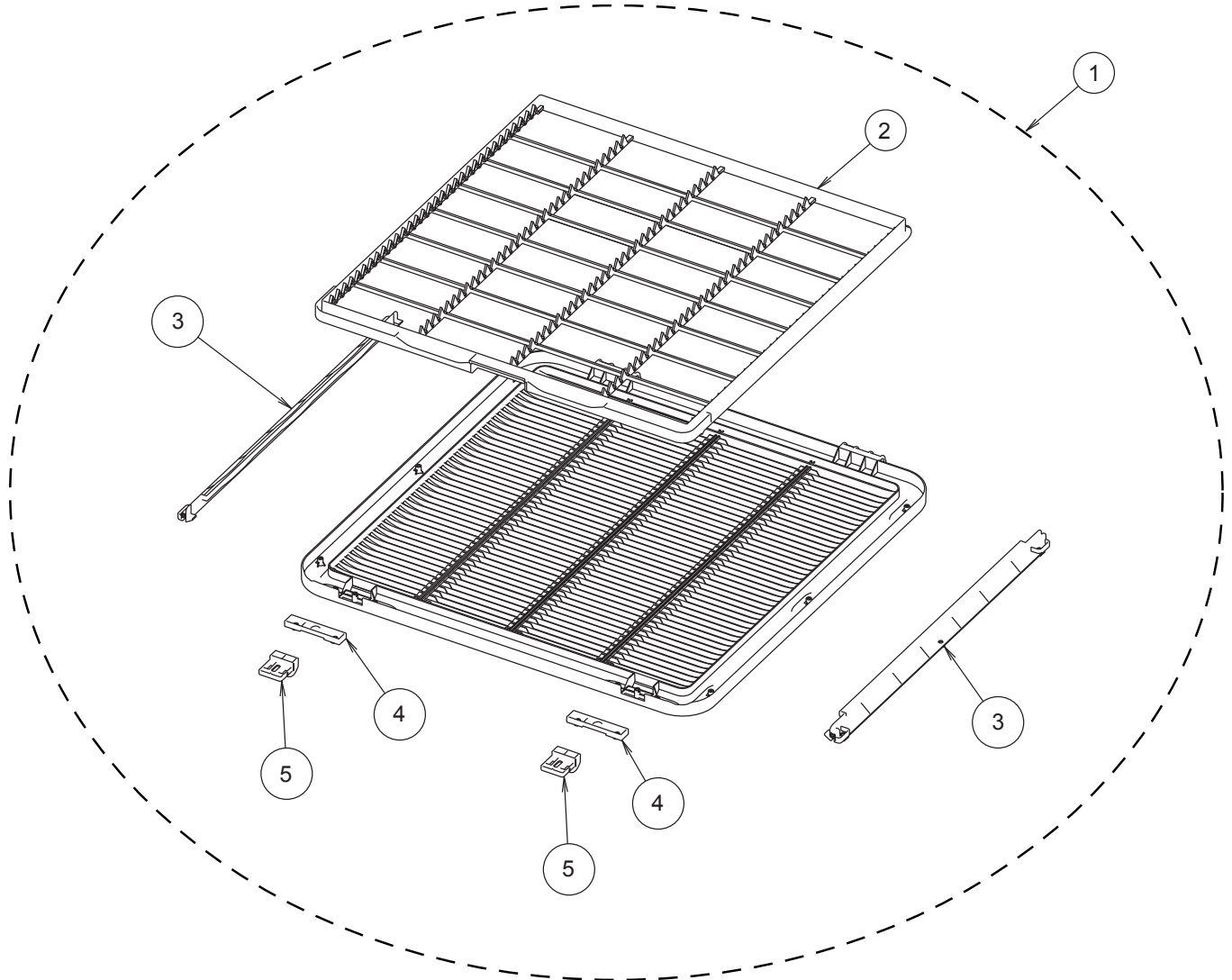


DANGER

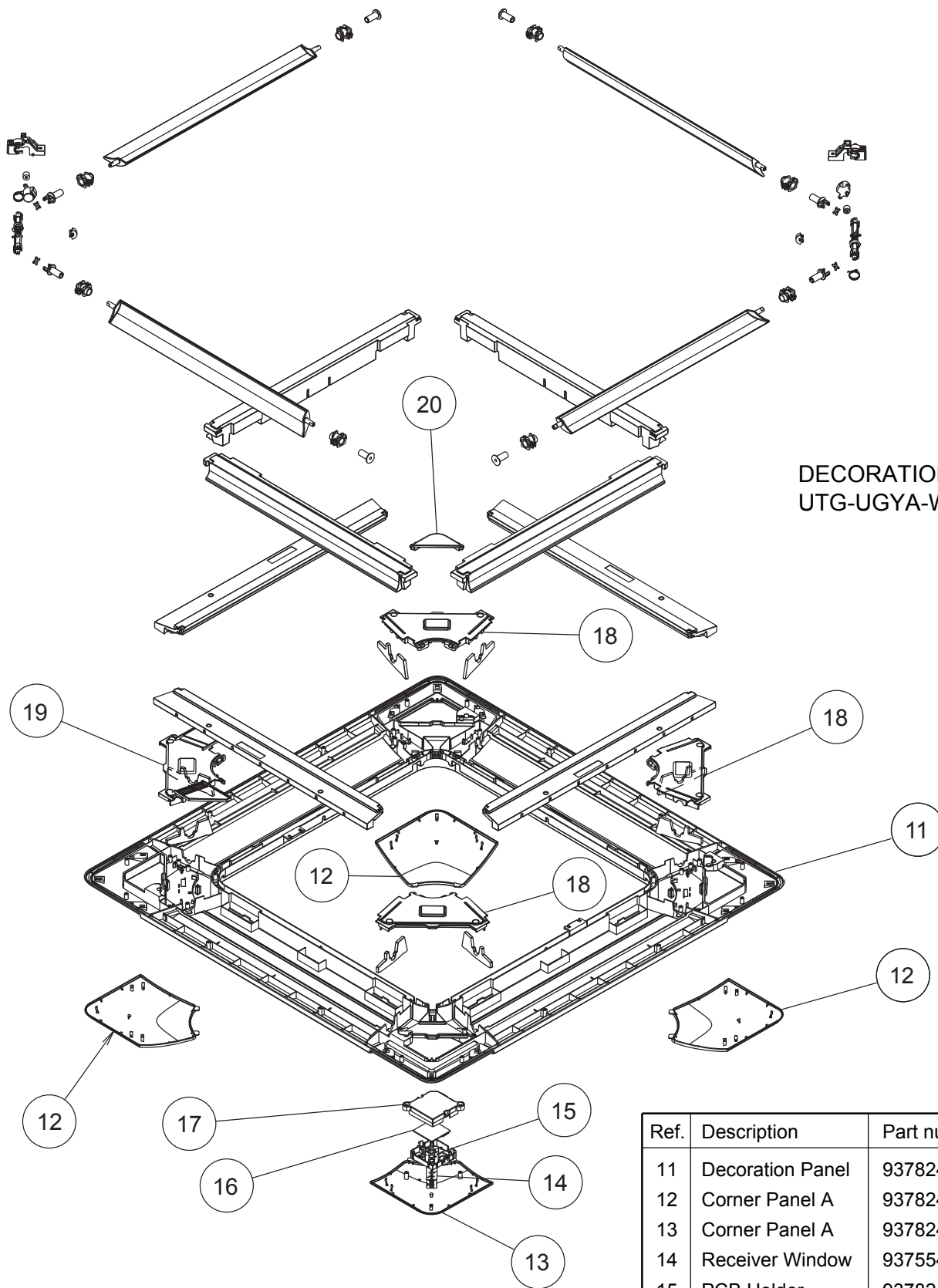
This part (Choke coil) generates high voltages. Never touch this part.

PARTS

DECORATION PANEL
UTG-UGYA-W



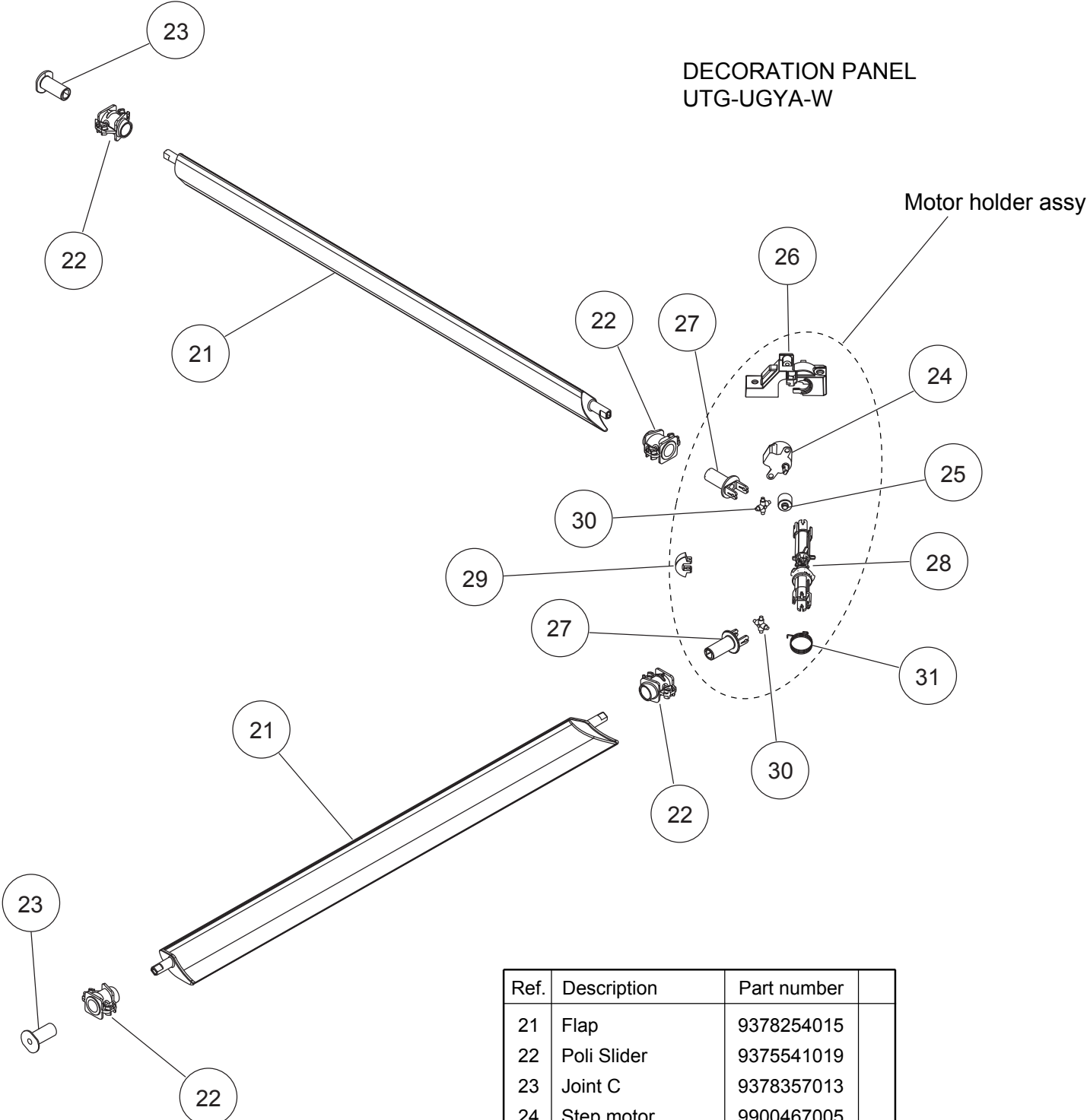
Ref.	Description	Part number
1	Intake Grille Assy	9378565012
2	Long Life Filter	9378252011
3	Filter Guide	9378253018
4	Hook Bracket	9378435018
5	Grille Hook	9378250017



DECORATION PANEL
UTG-UGYA-W

Ref.	Description	Part number
11	Decoration Panel	9378242012
12	Corner Panel A	9378243019
13	Corner Panel A	9378243026
14	Receiver Window	9375547011
15	PCB Holder	9378246010
16	PCB Sube Assy	9707372021
17	PCB Cover	9378245013
18	Panel Cover A	9378261013
19	Panel Cover B	9378262010
20	Drain Cover	9378359017

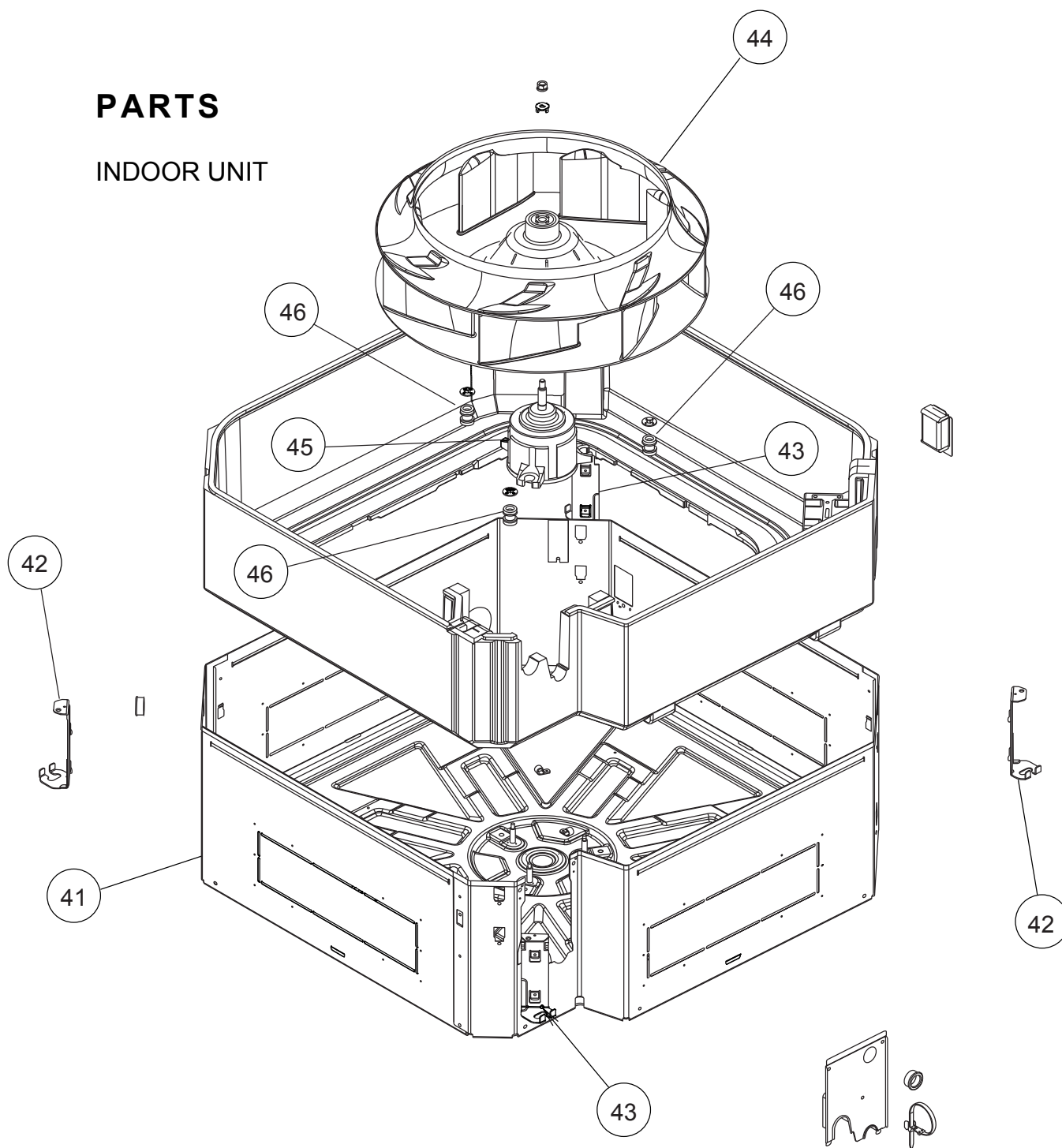
DECORATION PANEL
UTG-UGYA-W



Ref.	Description	Part number
21	Flap	9378254015
22	Poli Slider	9375541019
23	Joint C	9378357013
24	Step motor	9900467005
25	Gear A	9378256019
26	Motor Holder	9378255012
27	Joint A	9378258013
28	Joint B	9378259010
29	Gear B	9378257016
30	Joint Shaft	9378260016
31	Flap Spring	9378356016
--	Wire (Step Motor)	9707869019
--	Wire (Step Motor)	9707869026

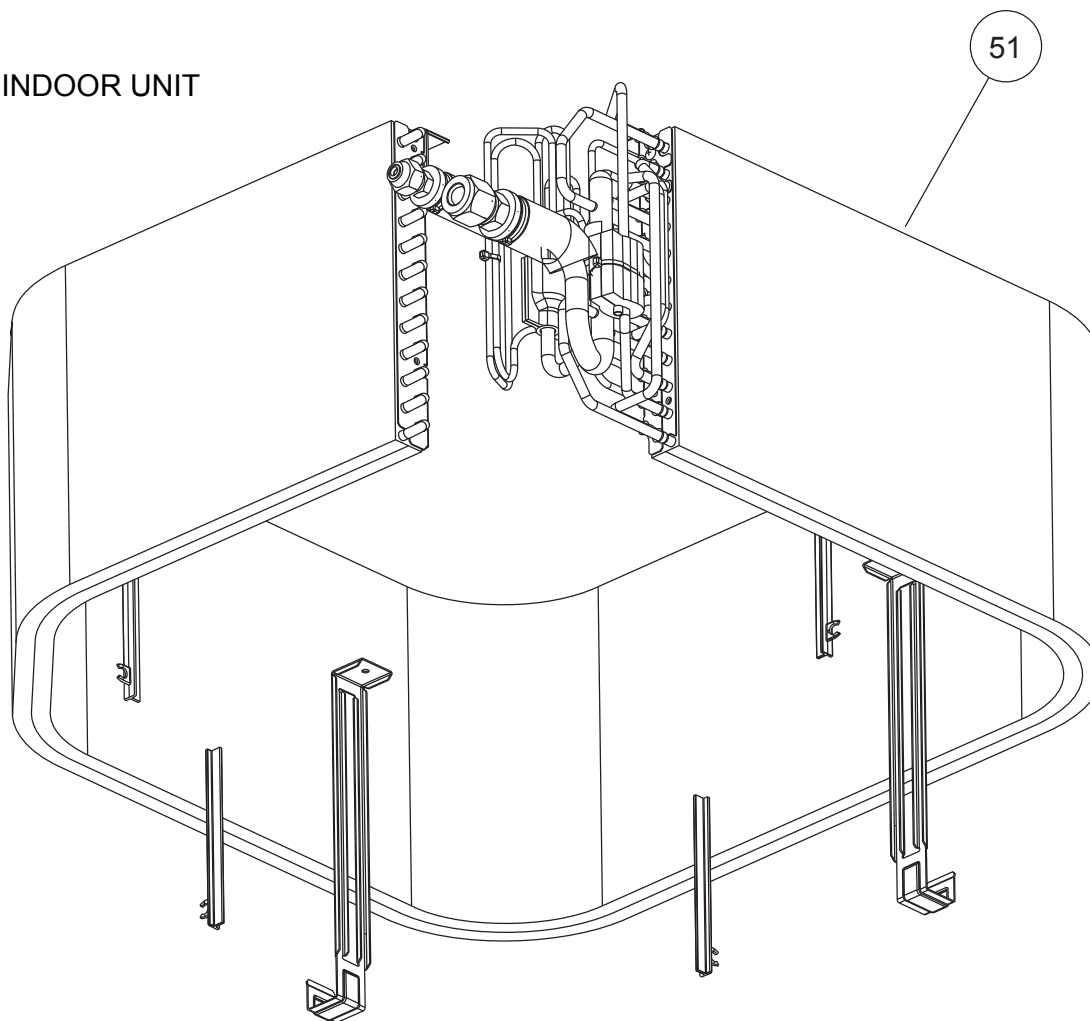
PARTS

INDOOR UNIT



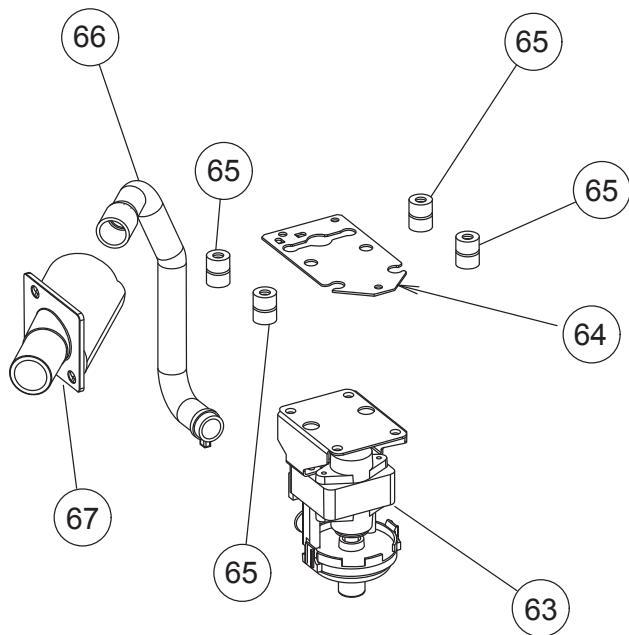
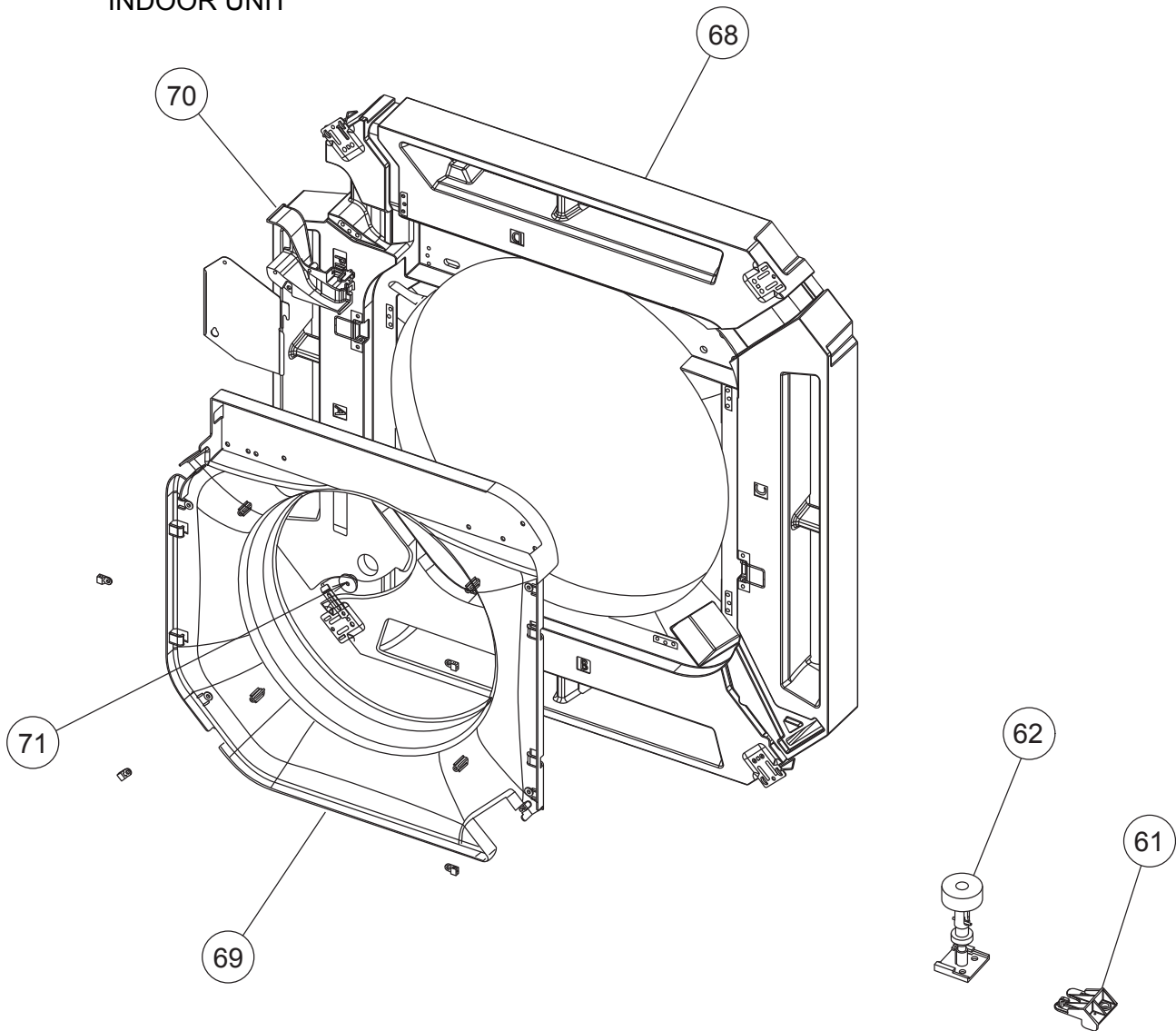
Ref.	Description	Part number
41	Cabinet C	9378196018
42	Hook R	9378197015
43	Hook L	9378198012
44	Turbo Fan Assy	9378228016
45	Motor, DC Brushless	9602716005
46	Rubber (Motor)	9378223011

INDOOR UNIT

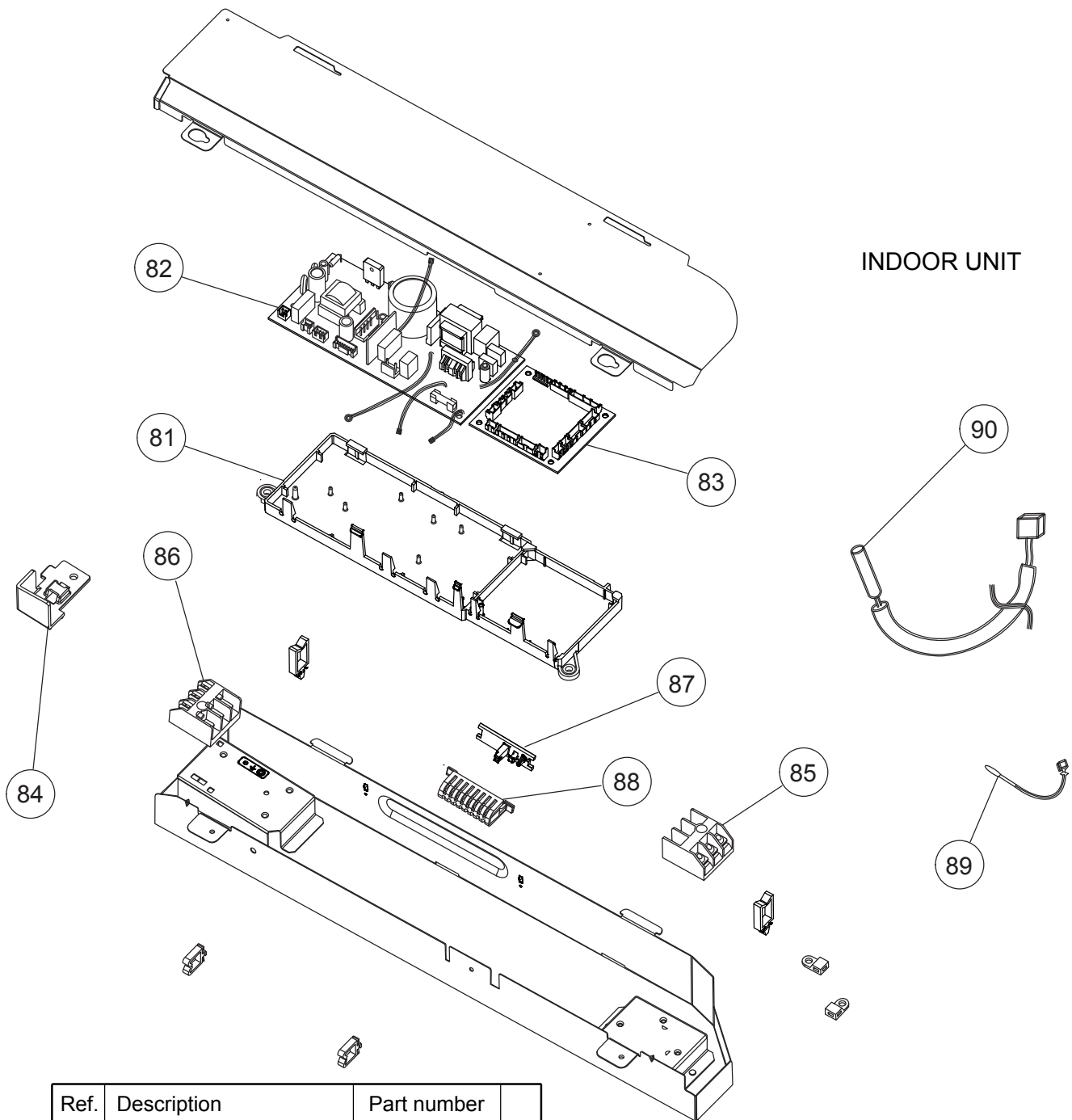


Ref.	Description	Part number	
51	Evaporator Total Assy	9378580015	
--	Coupling Pipe Assy	9373038481	
--	Distributor Assy	9371325446	

INDOOR UNIT

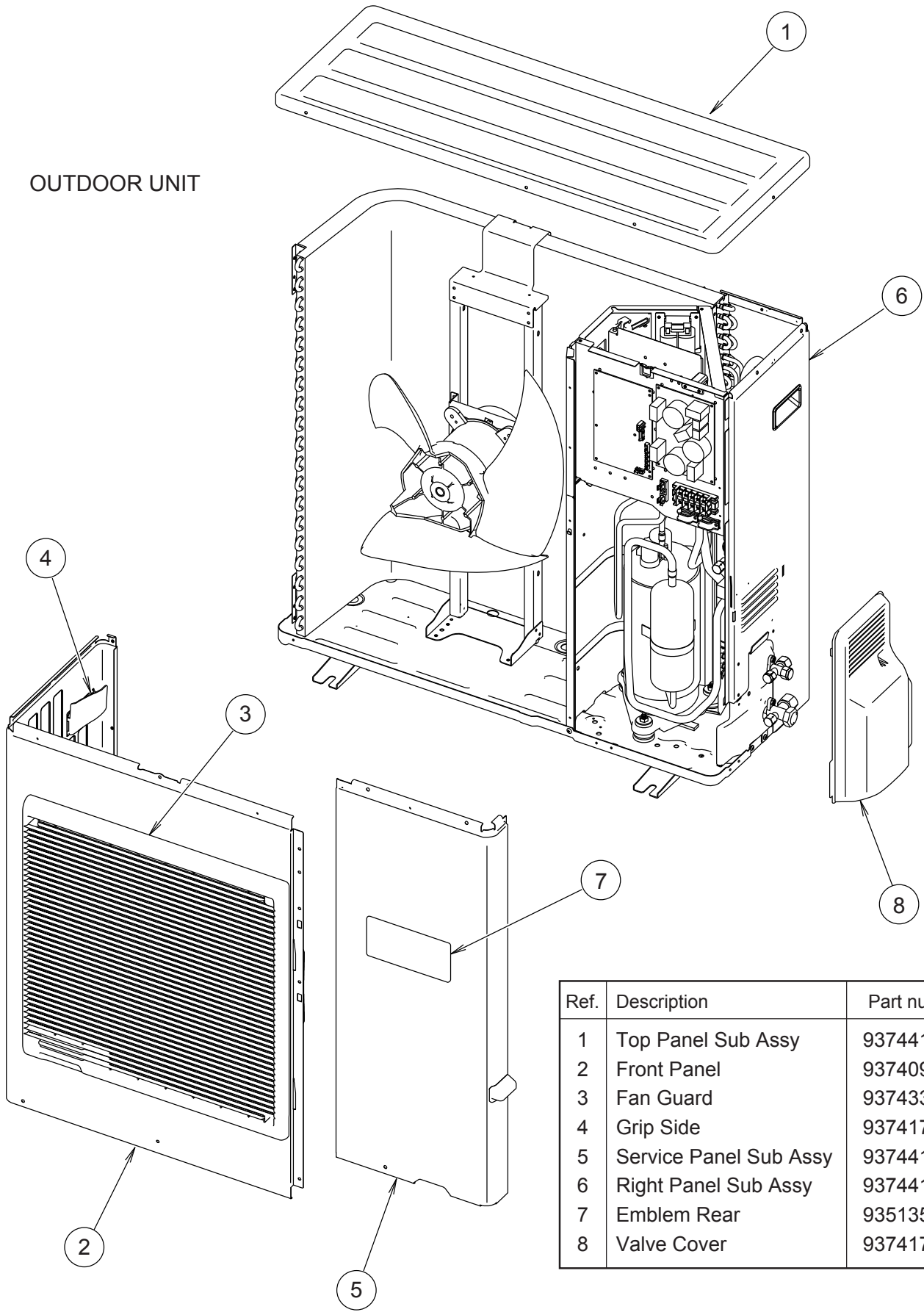


Ref.	Description	Part number
61	Sensor Holder	9378329010
62	Float Switch	9900465018
63	Pump Assy	9900464011
64	Drain Pump Holder B	9375518011
65	Rubber (Pump)	9378426016
66	Drain Hose	9378212015
67	Drain Port	9378213012
68	Drain Pan Assy	9378207011
69	Bell Mouth	9378227019
70	Terminal Wire Cover	9378548015
71	Drain Cap	9375502010
--	Drain Hose Assy	9377785039
--	Drain Pan Hook	9378331013



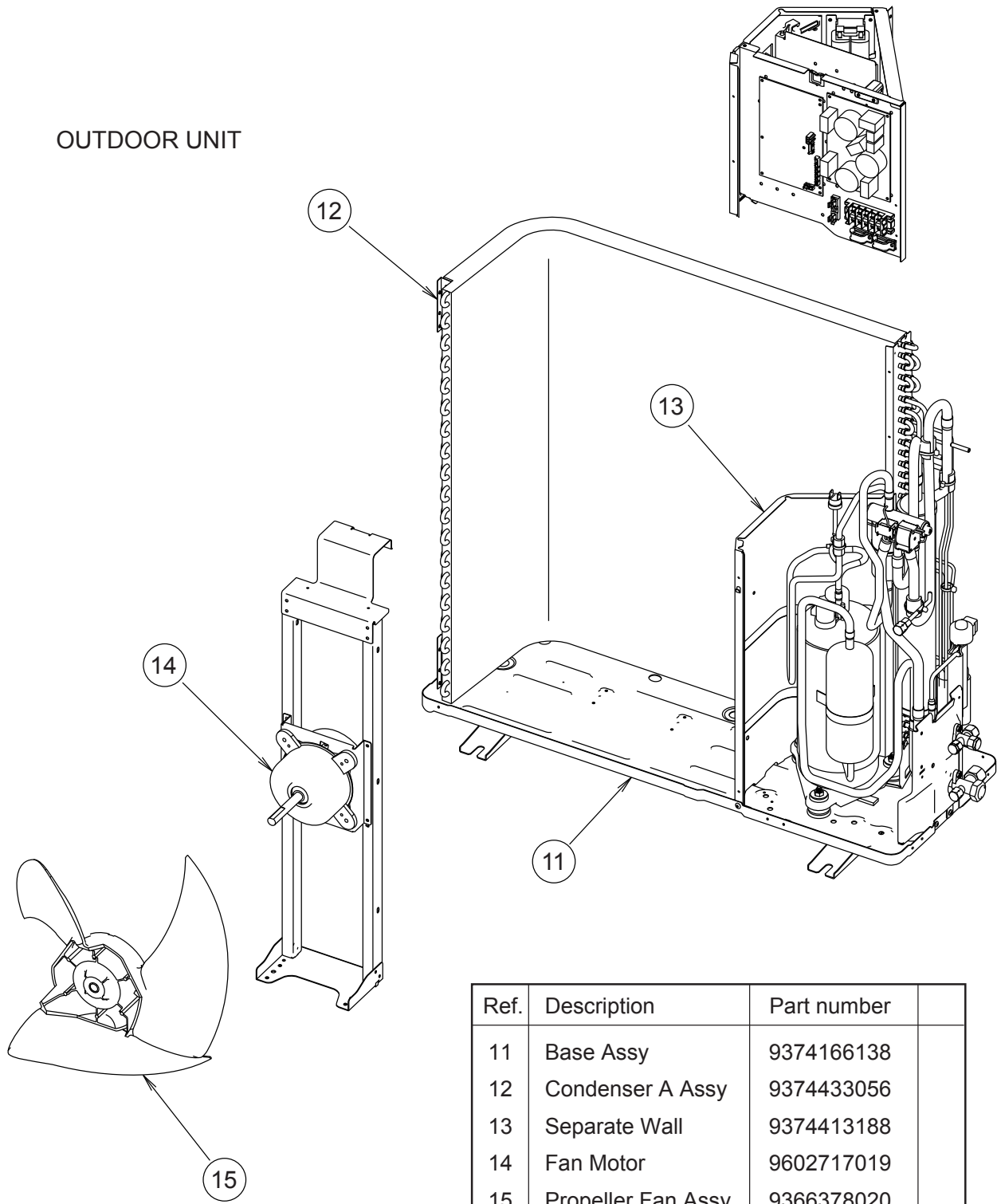
Ref.	Description	Part number
81	PCB Holder	9378205017
82	Power PCB Assy	9707398083
83	Controller PCB Assy (30)	9707393316
83	Controller PCB Assy (36)	9707393323
84	Clamp	9378237018
85	Terminal 3P	9306489045
86	Terminal 3P	9703345012
87	Thermistor Holder A	9378206014
88	Thermistor Holder B	9378330016
89	Room Thermistor	9900445010
90	Pipe Thermistor	9900470012
--	Remote Control	9372266199
--	Wire (to Remote Control)	9703301049
--	Wire (Control - Power) 8 lines	9900470012
--	Wire (Control - Power) 3 lines	9372266199

OUTDOOR UNIT

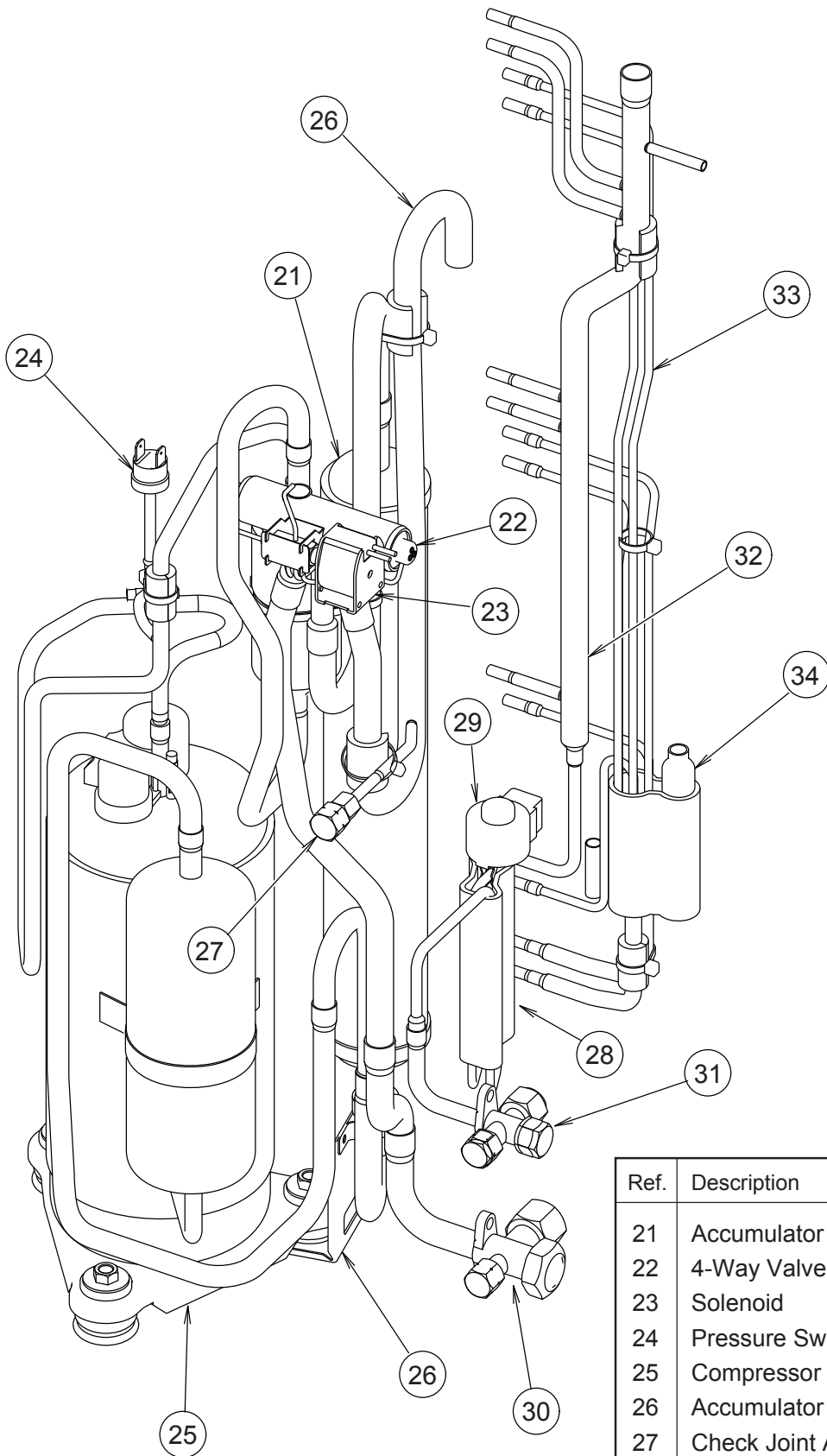


Ref.	Description	Part number	
1	Top Panel Sub Assy	9374417032	
2	Front Panel	9374094066	
3	Fan Guard	9374330010	
4	Grip Side	9374173013	
5	Service Panel Sub Assy	9374415052	
6	Right Panel Sub Assy	9374416127	
7	Emblem Rear	9351355005	
8	Valve Cover	9374174010	

OUTDOOR UNIT



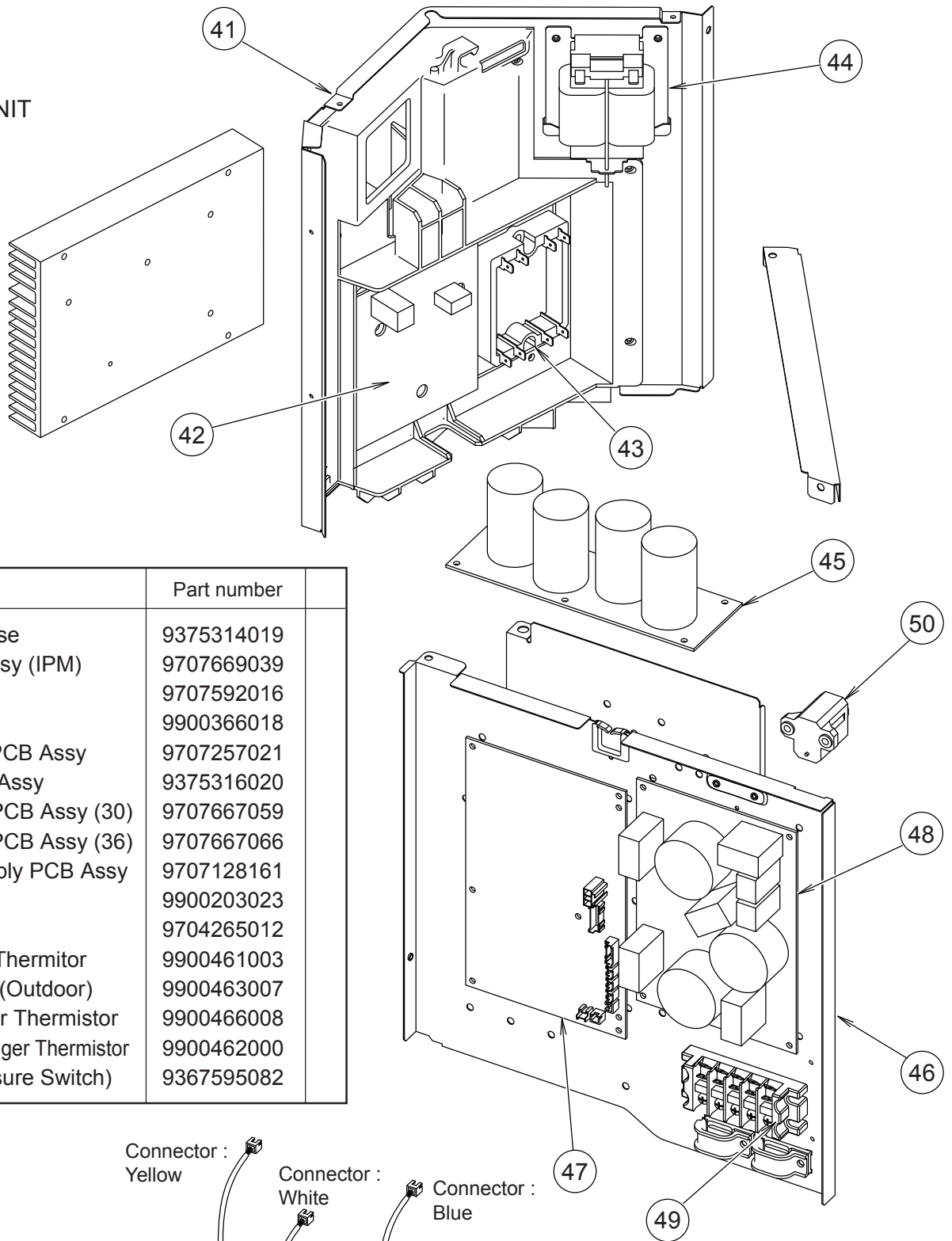
Ref.	Description	Part number
11	Base Assy	9374166138
12	Condenser A Assy	9374433056
13	Separate Wall	9374413188
14	Fan Motor	9602717019
15	Propeller Fan Assy	9366378020



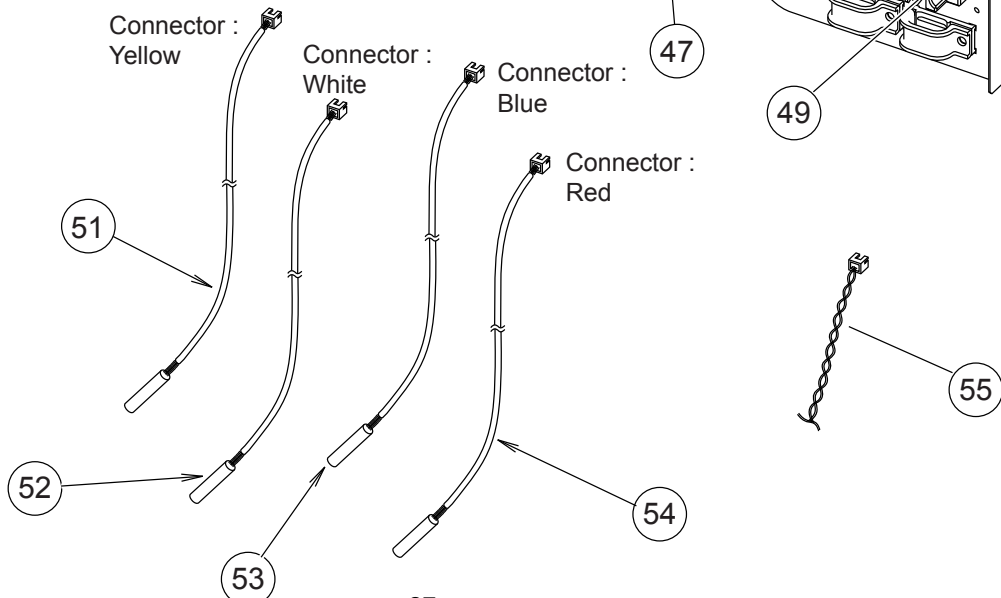
OUTDOOR UNIT

Ref.	Description	Part number
21	Accumulator	9385005006
22	4-Way Valve	9900164010
23	Solenoid	9970055034
24	Pressure Switch	9900186012
25	Compressor Assy	9372558126
26	Accumulator Support Assy	313986353804
27	Check Joint Assy	9372802038
28	Expansion Valve Assy	9370947144
29	Coil (Expansion Valve)	9900057039
30	3-Way Valve Assy	9377959010
31	3-Way Valve Assy	9377958013
32	Inlet Pipe (Cond) A Assy	9373461067
33	Outlet Pipe (Cond) A Assy	9374266104
34	Strainer Assy	9372524015

OUTDOOR UNIT



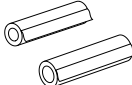

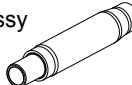

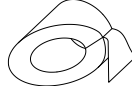
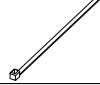
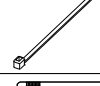





Ref.	Description	Part number
41	Inverter Case	9375314019
42	TR PCB Assy (IPM)	9707669039
43	ACTPM	9707592016
44	Choke Coil	9900366018
45	Capacitor PCB Assy	9707257021
46	PCB Case Assy	9375316020
47	Controller PCB Assy (30)	9707667059
47	Controller PCB Assy (36)	9707667066
48	Power Supply PCB Assy	9707128161
49	Terminal	9900203023
50	Thermistor	9704265012
51	Discharge Thermistor	9900461003
52	Thermistor (Outdoor)	9900463007
53	Compressor Thermistor	9900466008
54	Heat Exchanger Thermistor	9900462000
55	Wire (Pressure Switch)	9367595082


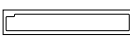
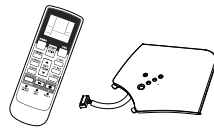
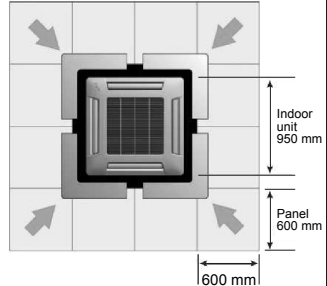
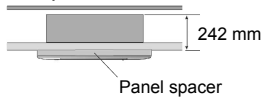


ACCESSORIES





INDOOR UNIT

Name and Shape	Q'ty	Application
Template (Carton top) 	1	For installing indoor unit
Washer 	8	For installing indoor unit
Coupler heat insulation 	2	For indoor side pipe joint
Insulation 	1	For installing drain pipe
Drain hose assy 	1	For installing drain pipe
Hose band assy 	1	For installing drain pipe
Drain pipe insulation 	1	For installing drain pipe
Binder (Large) 	3	For electrical wiring
Binder (Small) 	1	For electrical wiring
Wired remote control 	1	
Remote Control Cord 	1	For connecting remote control
Tapping screw ($\phi 4 \times 16$) 	2	For installing remote control

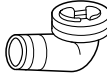

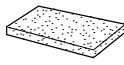
OPTIONAL PARTS

Name and Shape	Model name	Application
Wired remote contro 	UTB-YUD	Control unit on wall
Air outlet shutter plate 	UTR-YDZC	Install the plate at outlet when carrying out 3-way direction operation.
Wireless remote control kit 	UTY-LRHYA1	Wireless remote control and IR receiver unit
Wide panel 	UTG-AGYA	For ceiling hole
Panel spacer 	UTG-BGYA-W	For making up difference

DECORATION PANEL

Name and Shape	Q'ty	Application
Hexigon Screw 	4	For mounting decoration panel
Screw 	4	For installing grille holding wire
Strap 	4	For installing corner panel
Grille holding Wire 	2	For installing intake grille

OUTDOOR UNIT

Name and Shape	Q'ty	Application	Part number
Drain pipe 	1	For outdoor unit drain piping work	9303029015
Drain cap 	2		313166024302
Installation (seal) 	1	For filling in a gap at the entrance of connection cords	9374756018

0804G3413
