



SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL

Indoor unit	Outdoor unit
ASGA18FUTB-U	AOGA18FUTBRU
ASGA24FUTB-U	AOGA24FUTBRU



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# SPECIFICATIONS

## ELECTRICAL DATA

INDOOR UNIT		ASGA18FUTB-U	ASGA24FUTB-U
OUTDOOR UNIT		AOGA18FUTBRU	AOGA24FUTBRU
POWER SOURCE		220 V - 240 V, 50 Hz	220 V - 240 V, 50 Hz
COOLING (ISO-T3) at 230V	Capacity	16,600 BTU/h	20,500 BTU/h
	Power consumption	3,980 kW	4,920 kW
	EER	8.34 BTU/hW	8.33 BTU/hW
	Operation current	9.3 A	11.3 A
	Power factor	0.9	0.9
COOLING (ISO-T1) at 220-230-240V	Capacity	19,300-19,300-19,300 BTU/h	24,100-24,100-24,100 BTU/h
	Power consumption	1.71 - 1.76 - 1.77 kW	2.13 - 2.17 - 2.19 kW
	EER	11.29-10.97-10.90 BTU/hW	11.31-11.11-11.00 BTU/hW
	Operation current	8.3 - 8.2 - 8.1 A	10.2 - 10.1 - 10.0 A
	Moisture removal	1.0 L/h	2.0 L/h
MAXIMUM CURRENT		13.0 A	16.0 A

## FAN MOTOR AND FAN REVOLUTION (220 V - 240 V)

INDOOR UNIT	Discrimination	MFD-U70XA3F	
	Powerful	1,310 rpm	1,390 rpm
	S-high	1,200 rpm	1,280 rpm
	High	1,090 rpm	1,150 rpm
	Medium	980 rpm	1,020 rpm
	Low	870 rpm	890 rpm
	Quiet	760 rpm	760 rpm
	OUTDOOR UNIT	Discrimination	MFB-30BTT
Speed		750 rpm - 790 rpm	740 rpm - 780 rpm

## AIR CIRCULATION (220 V - 240 V)

INDOOR UNIT	Powerful	1,400 m3/h	1,500 m3/h
	S-high	1,250 m3/h	1,350 m3/h
	High	1,130 m3/h	1,200 m3/h
	Medium	1,000 m3/h	1,050 m3/h
	Low	870 m3/h	900 m3/h
	Quiet	740 m3/h	740 m3/h
OUTDOOR UNIT		3,400 m3/h - 3,600 m3/h	3,100 m3/h - 3,300 m3/h

## NOISE (220 V - 240 V)

INDOOR UNIT	S-high	47 dB	49 dB
	High	44 dB	46 dB
	Medium	41 dB	43 dB
	Low	38 dB	39 dB
	Quiet	34 dB	35 dB
OUTDOOR UNIT		56 dB - 57 dB	56 dB - 57 dB

## COMPRESSOR AND REFRIGERANT

TYPE	Hermetic reciprocating compressor, 2 poles, PSC motor			
DISCRIMINATION	AW 5517B-SF	AW 5524B-SF		
WEIGHT (with oil)	28.80 kg	30.40 kg		
PRECHARGED REFRIGERANT	1,300 g	1,950 g		
REFRIGERANT TYPE	R410A	R410A		
FULL CHARGE	Pipe length	7.5 m	1,300 g	1,950 g
		10 m	1,350 g	2,000 g
		15 m	1,450 g	2,100 g
		20 m	1,550 g	2,200 g
ADDITIONAL CHARGE		20 g/m	20 g/m	
MAXIMUM HEIGHT DIFFERENCE		8 m	8 m	

## DIMENSIONS

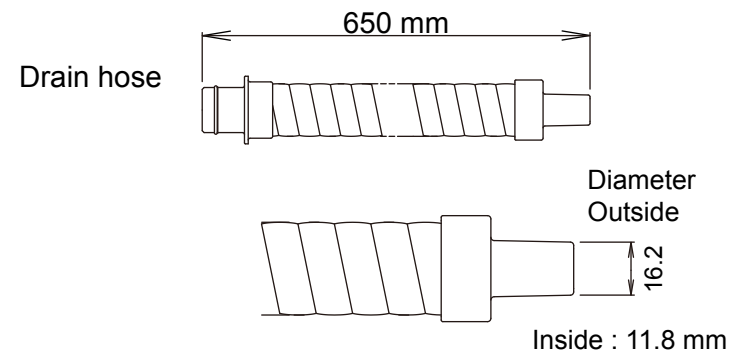
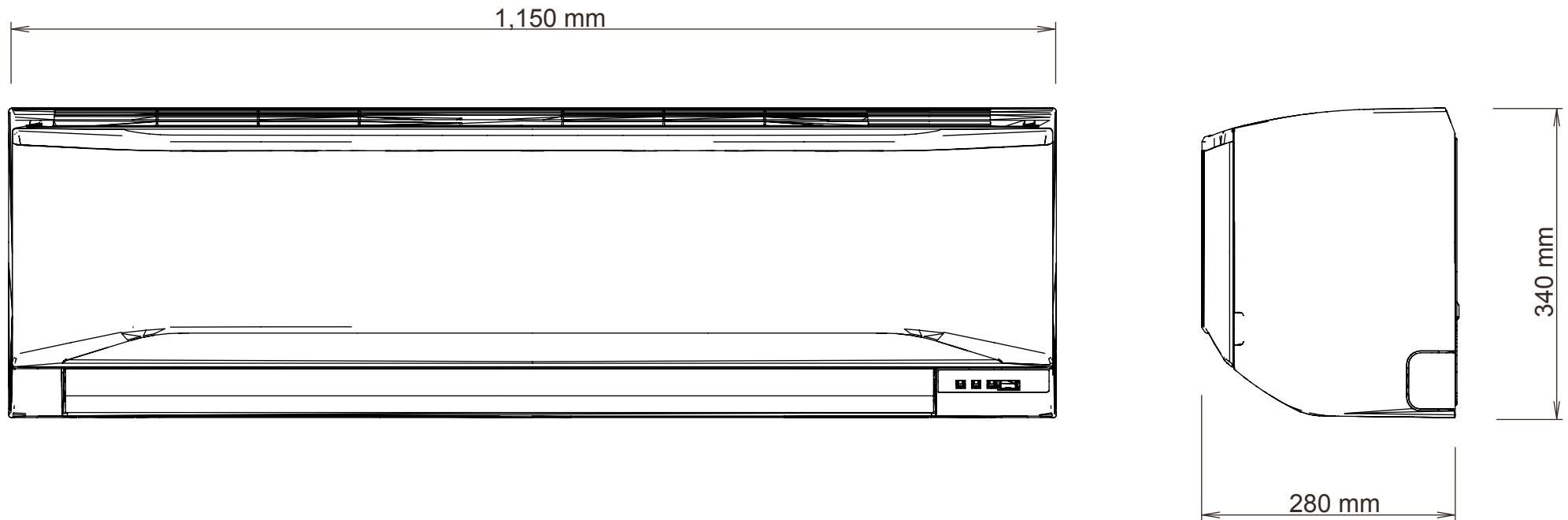
INDOOR UNIT	H x W x D	340 x 1,150 x 280 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm

## WEIGHT

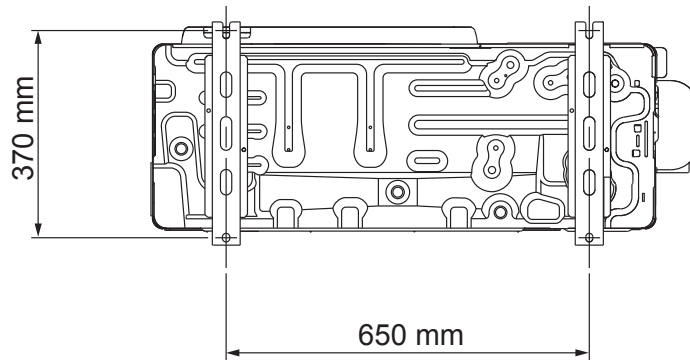
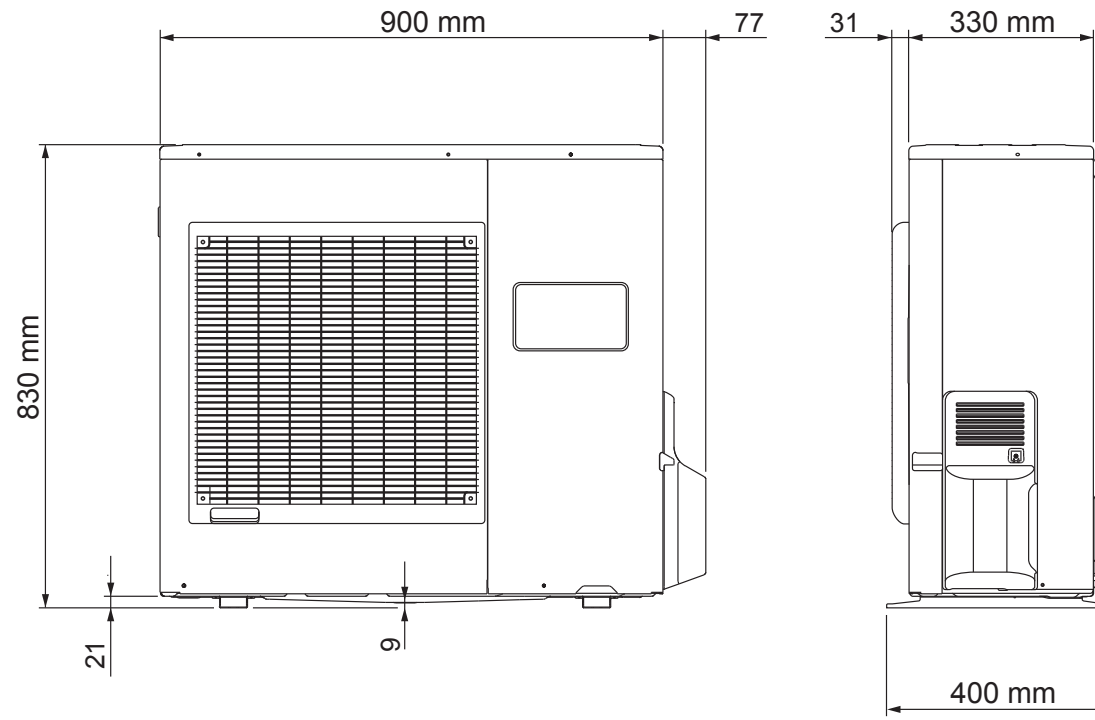
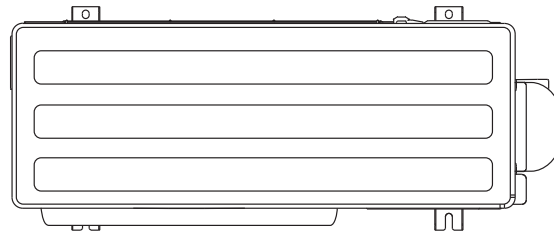
INDOOR UNIT	Net / Shipping	16 kg / 22 kg	
OUTDOOR UNIT	Net / Shipping	64 kg / 71 kg	71 kg / 78 kg

# DIMENSIONS

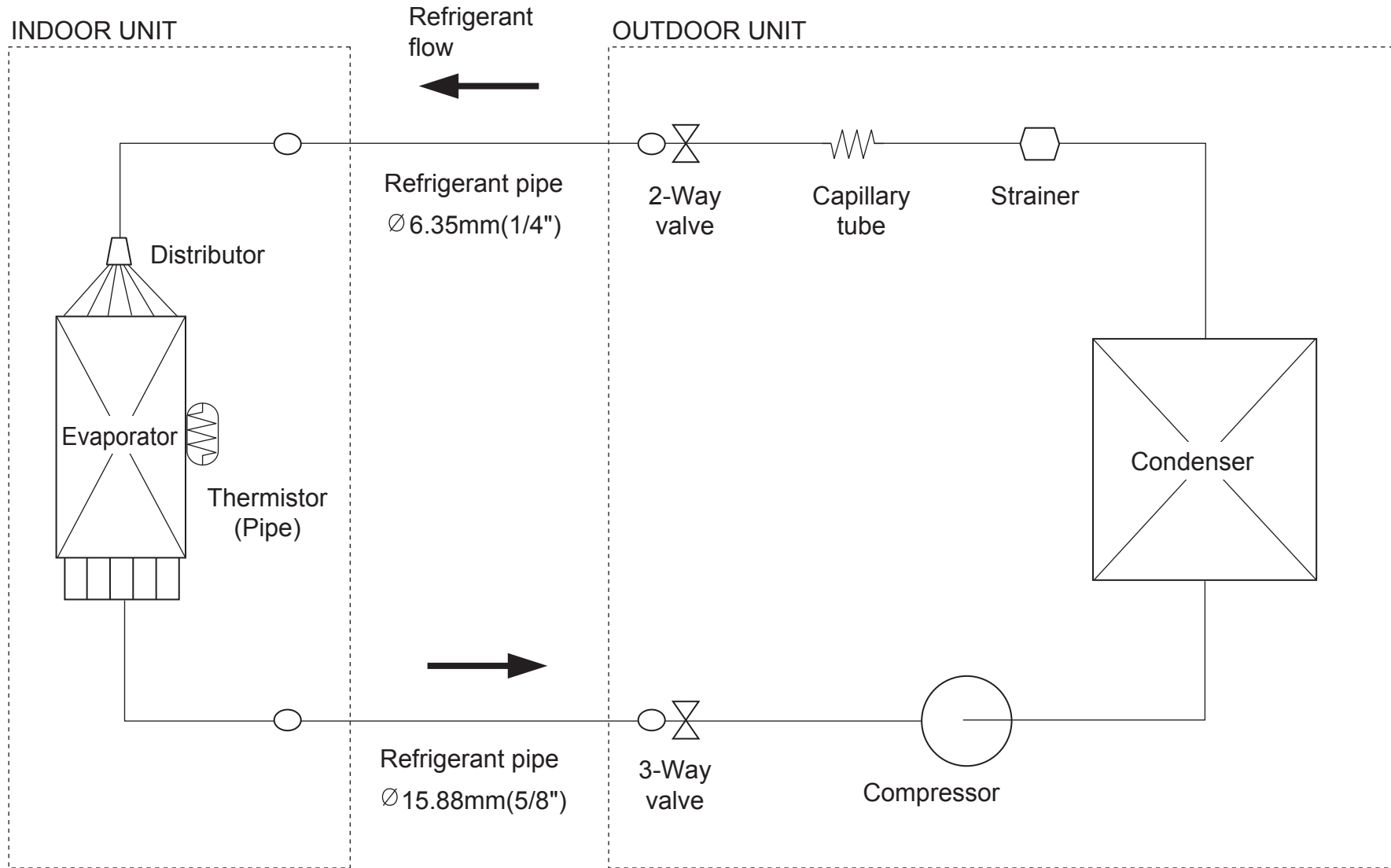
## INDOOR UNIT



OUTDOOR UNIT

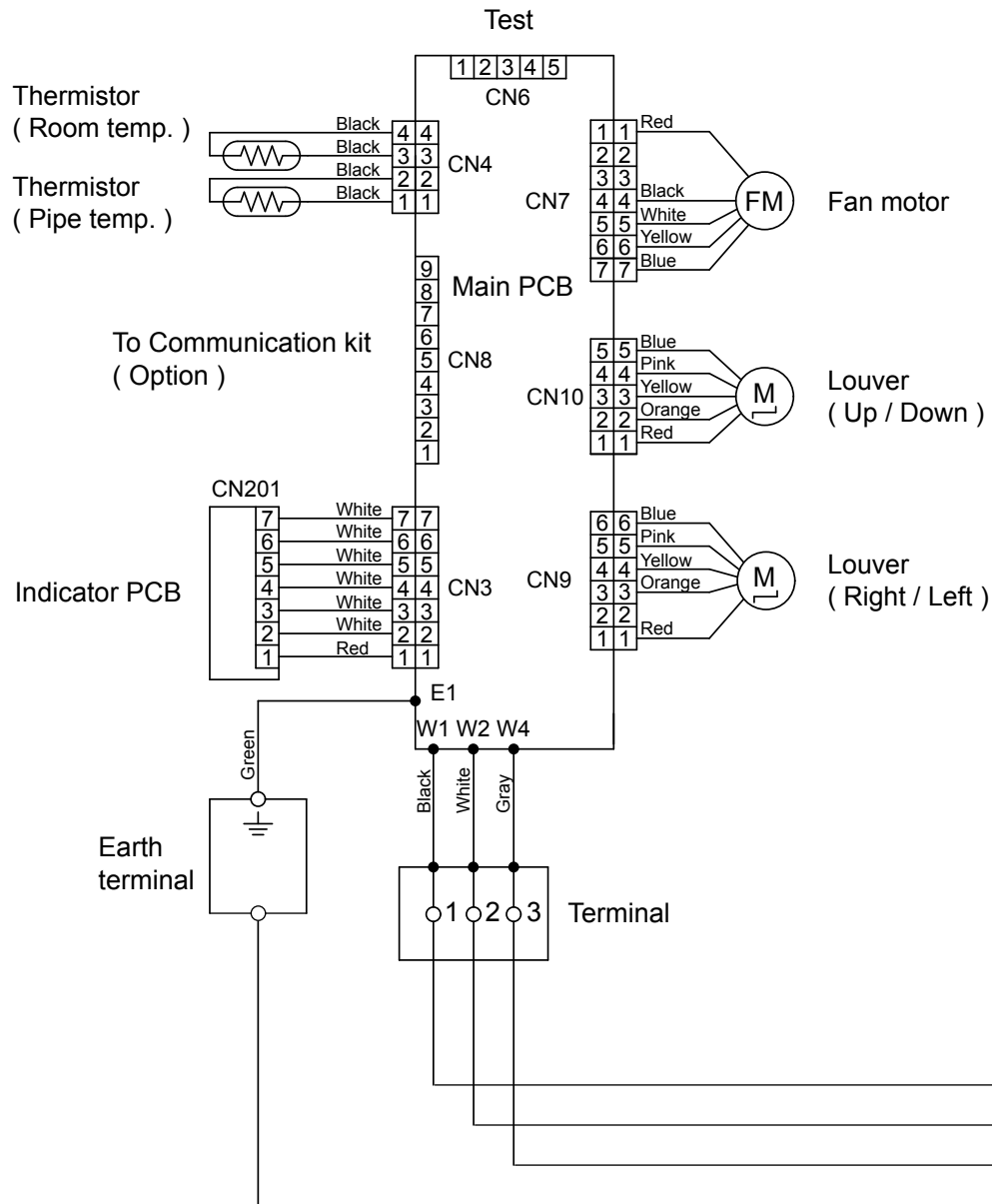


# REFRIGERANT SYSTEM DIAGRAM

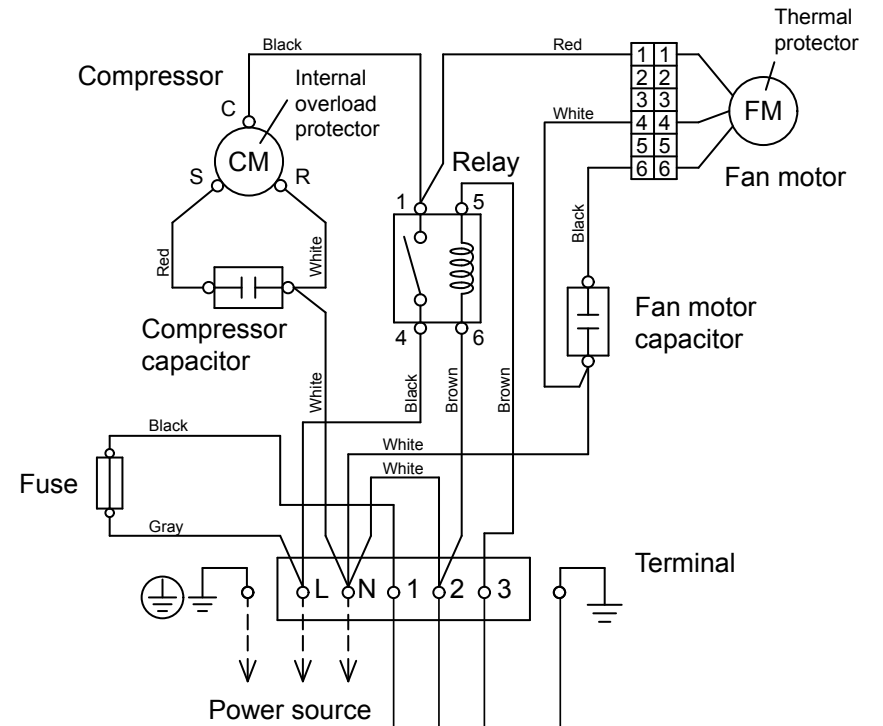


# CIRCUIT DIAGRAM

## INDOOR UNIT



## OUTDOOR UNIT

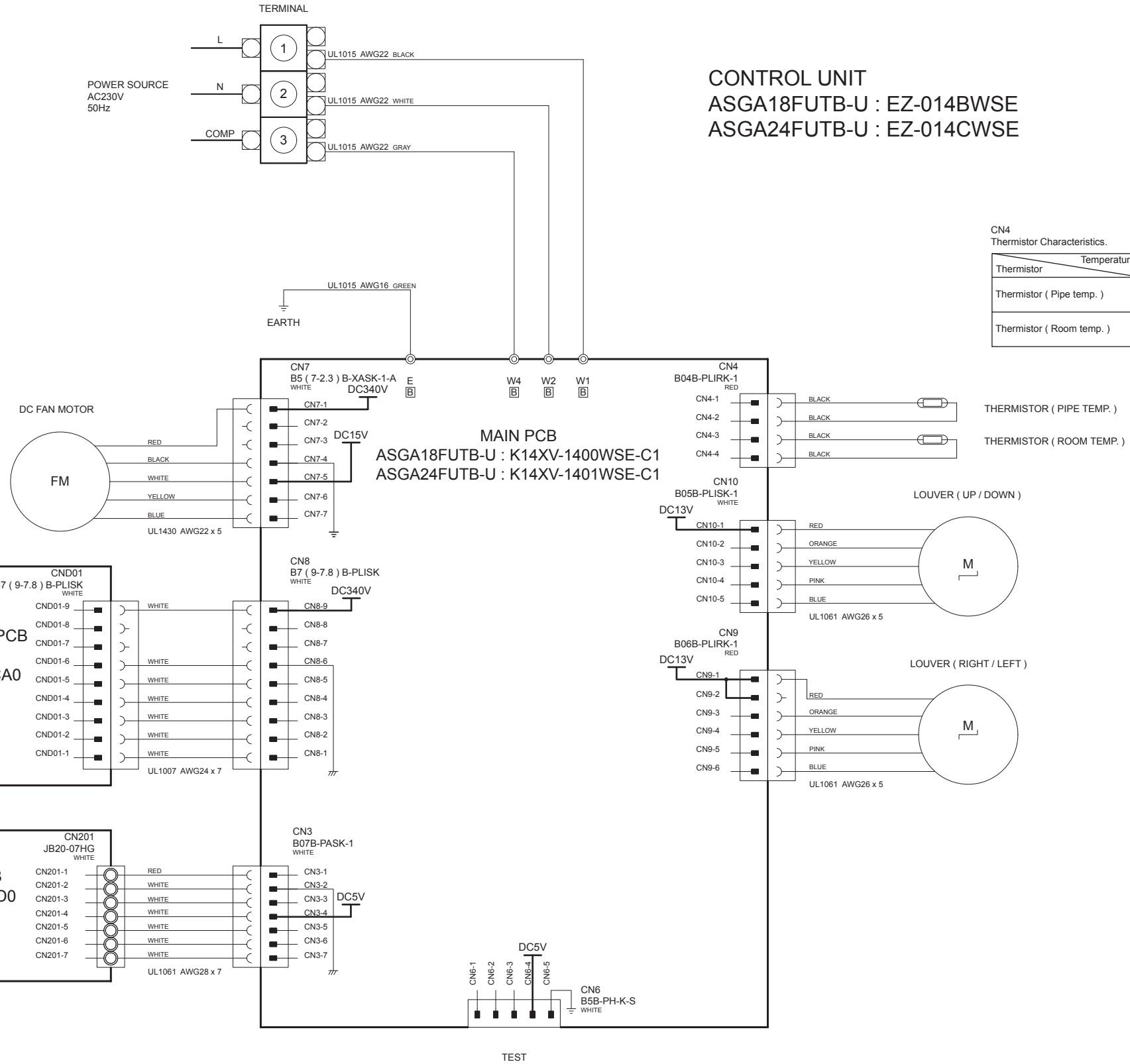


# INDOOR PCB CIRCUIT DIAGRAM

CONTROL UNIT  
 ASGA18FUTB-U : EZ-014BWSE  
 ASGA24FUTB-U : EZ-014CWSE

CN7 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	PG	Revolution pulse output	Blue



CN4 Thermistor Characteristics.

Thermistor	Temperature	( 0°C )	(20°C )	(30°C )
Thermistor ( Pipe temp. )	Resistance	176.0 k Ω	62.9 k Ω	39.6 k Ω
	Voltage	1.1 V	2.2 V	2.8 V
Thermistor ( Room temp. )	Resistance	33.6 k Ω	12.5 k Ω	8.0 k Ω
	Voltage	1.1 V	2.2 V	2.8 V

# ERROR DETECTION

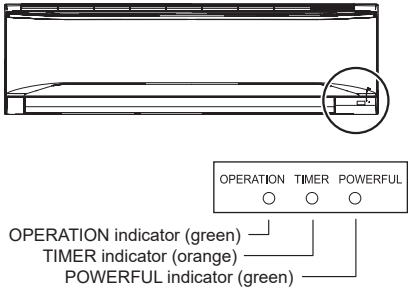
If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.

If you use a wired remote control, error codes will appear on the remote control display.

See the lamp blinking patterns and error codes in the table.

An error display is displayed only during operation.

## Troubleshooting with the indoor unit display



## Troubleshooting with the wired remote control display (Option)

If an error occurs, the following display will be shown. ("Er" will appear in the set room temperature display.)



### Display mode

- : 0.5s ON / 0.5s OFF
- ◇ : 0.1s ON / 0.1s OFF
- ( ) : Number of flashing

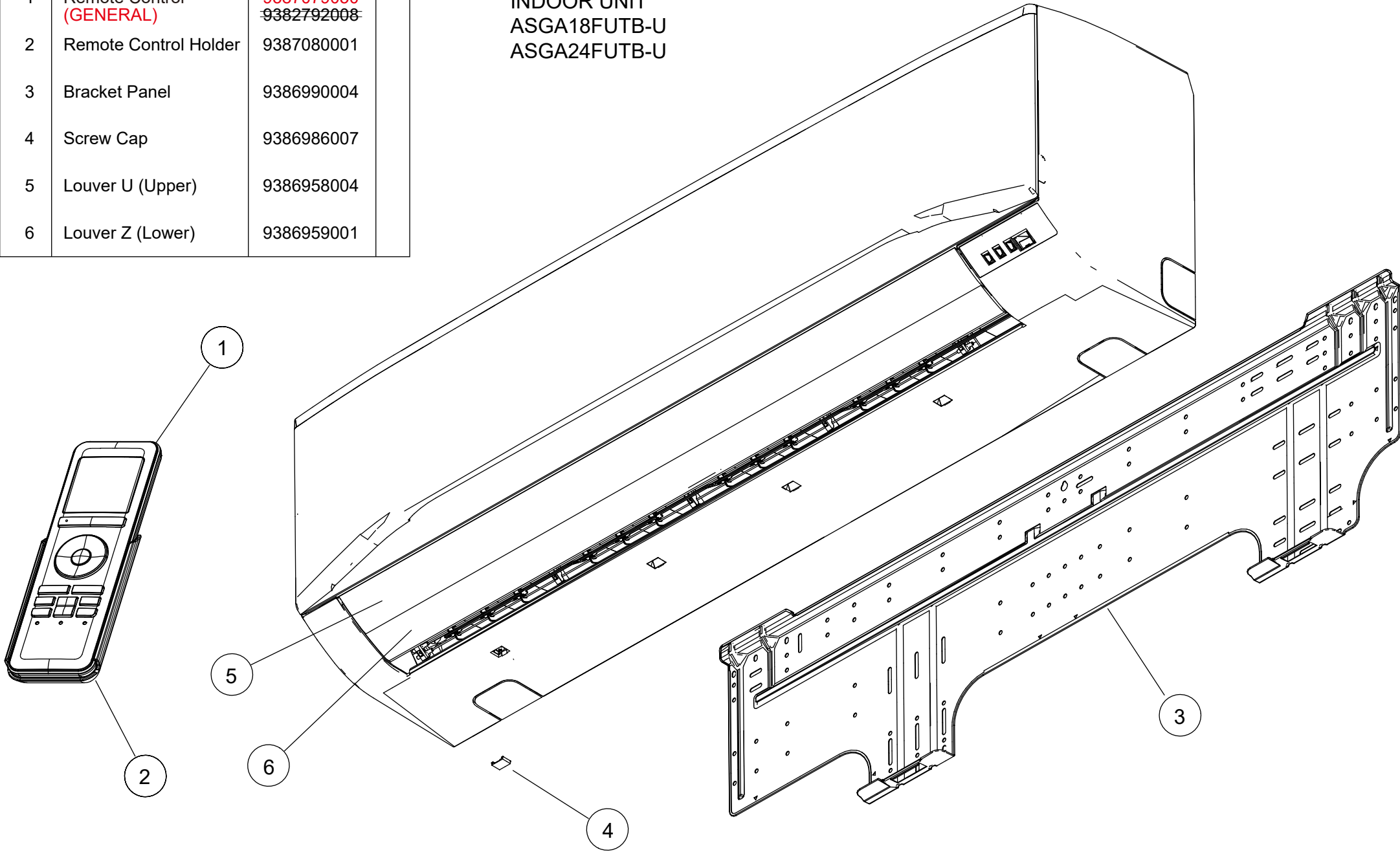
Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	POWERFUL lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote control communication error
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(9)	●(7)	◇	97	Outdoor unit fan motor error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(4)	◇	A4	High pressure error

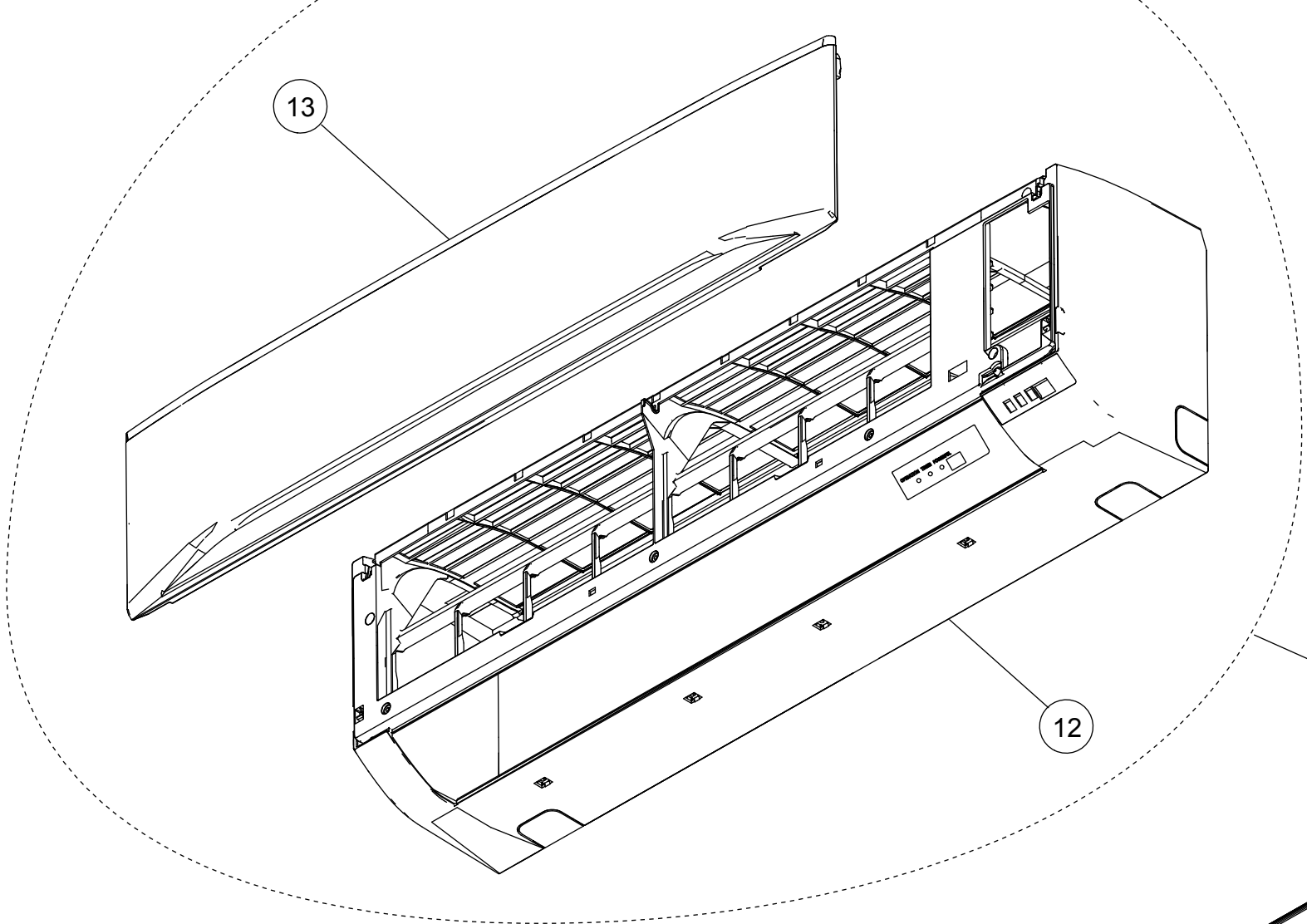


Ref	Description	Parts number	
1	Remote Control <b>(GENERAL)</b>	<b>9387079050</b> <del>9382792008</del>	
2	Remote Control Holder	9387080001	
3	Bracket Panel	9386990004	
4	Screw Cap	9386986007	
5	Louver U (Upper)	9386958004	
6	Louver Z (Lower)	9386959001	

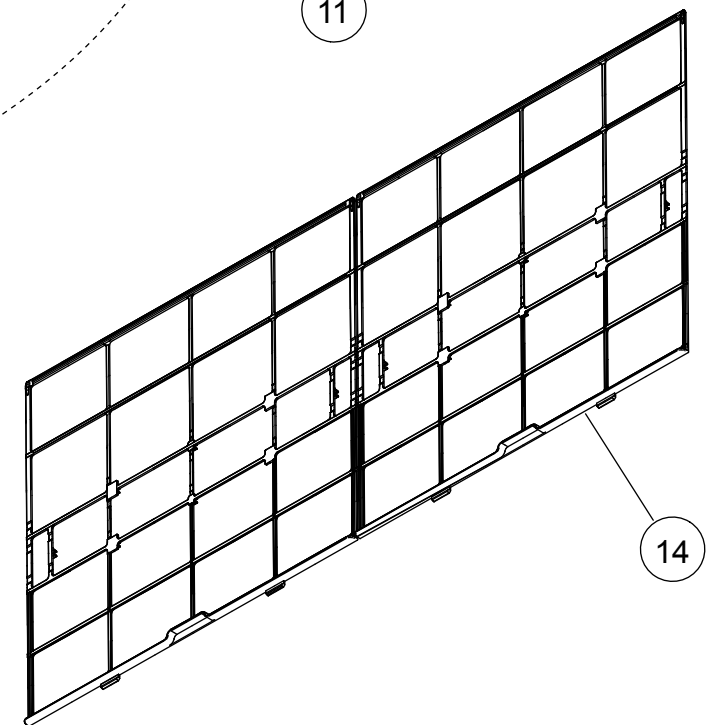
## PARTS

INDOOR UNIT  
ASGA18FUTB-U  
ASGA24FUTB-U



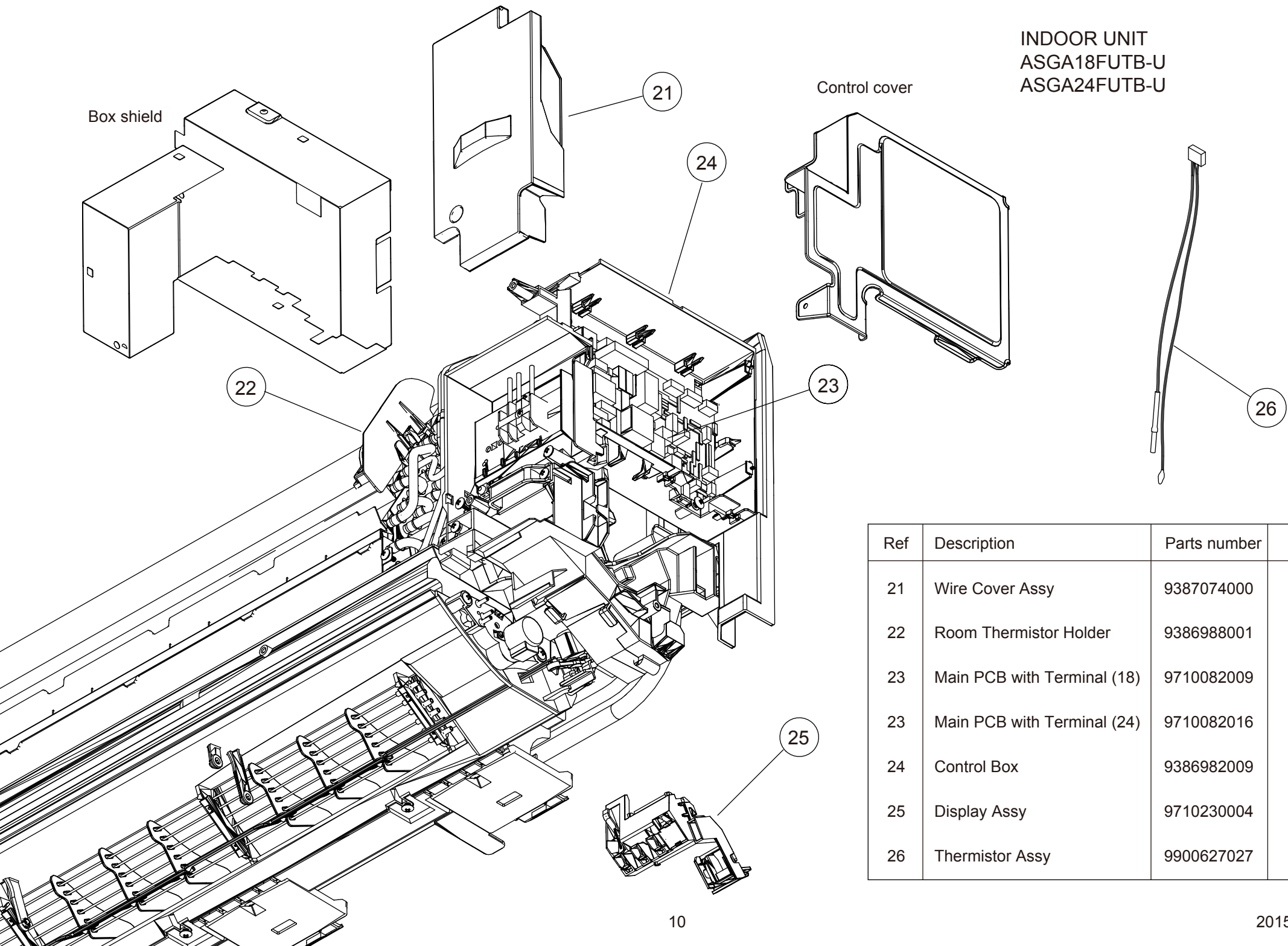


INDOOR UNIT  
ASGA18FUTB-U  
ASGA24FUTB-U



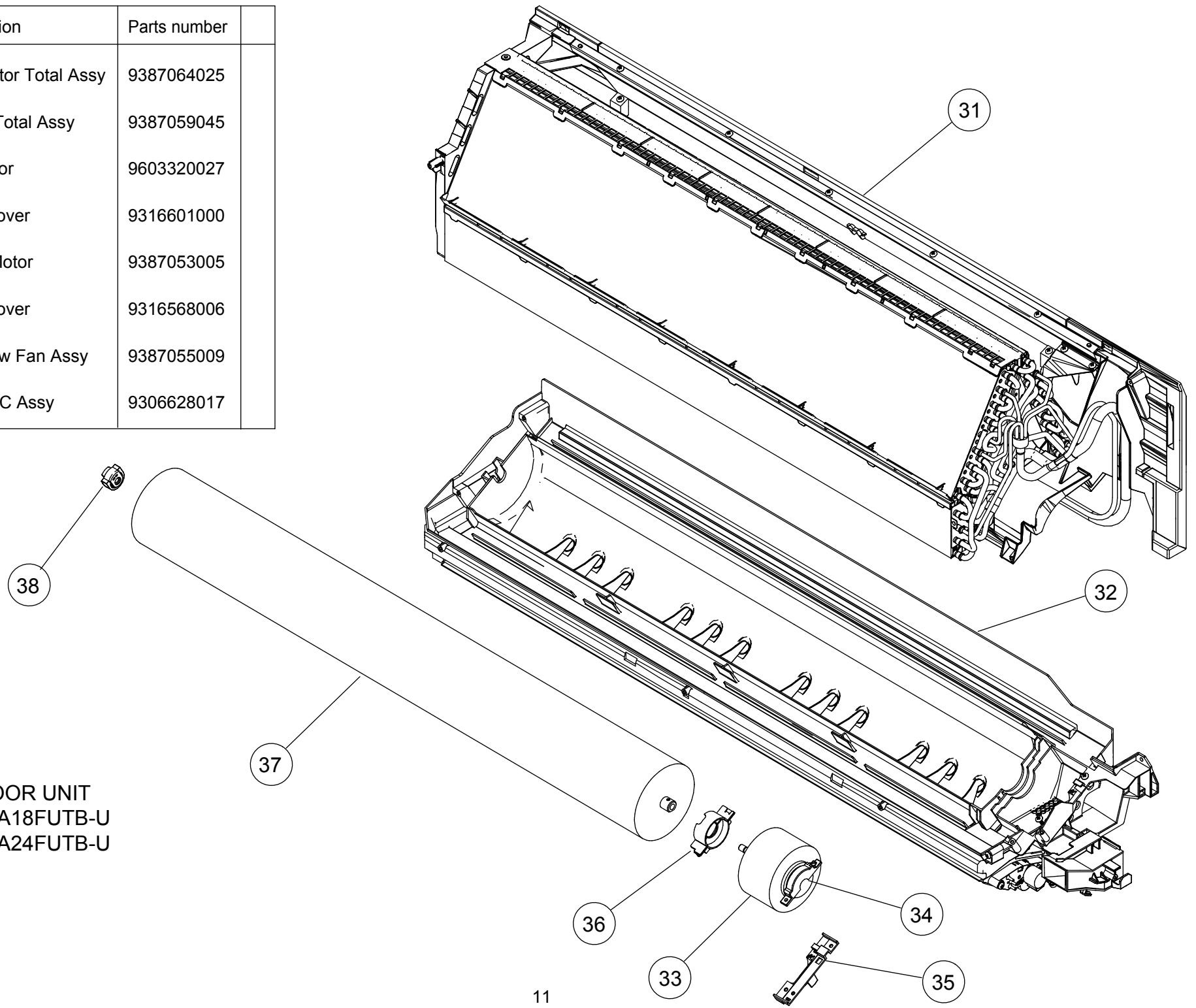
Ref	Description	Parts number
11	Front Panel Total Assy	9387072006
12	Front Panel	9386954006
13	Intake Grille Assy	9387073003
14	Air Filter	9386960007

INDOOR UNIT  
ASGA18FUTB-U  
ASGA24FUTB-U



Ref	Description	Parts number
21	Wire Cover Assy	9387074000
22	Room Thermistor Holder	9386988001
23	Main PCB with Terminal (18)	9710082009
23	Main PCB with Terminal (24)	9710082016
24	Control Box	9386982009
25	Display Assy	9710230004
26	Thermistor Assy	9900627027

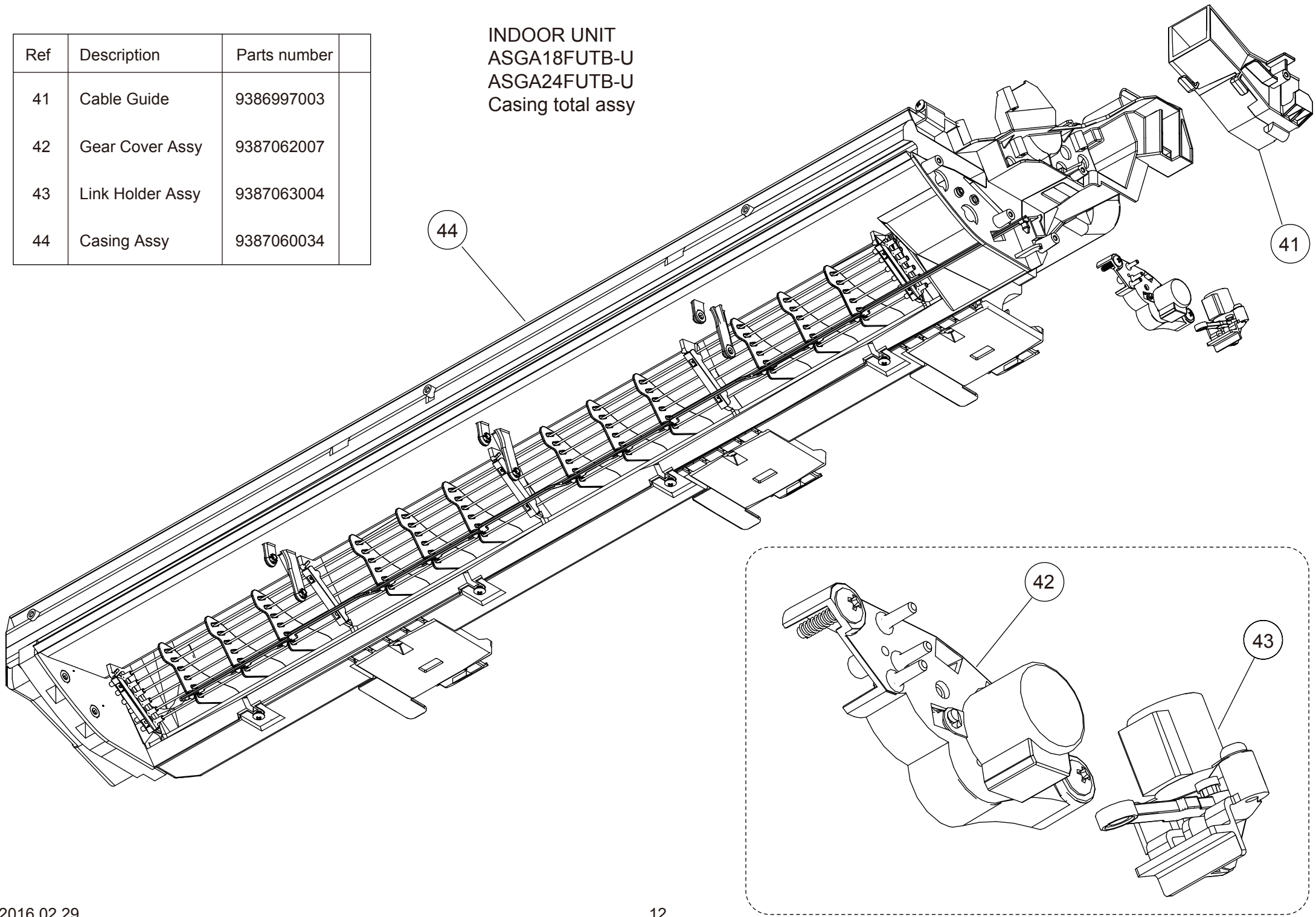
Ref	Description	Parts number
31	Evaporator Total Assy	9387064025
32	Casing Total Assy	9387059045
33	Fan Motor	9603320027
34	Motor Cover	9316601000
35	Space Motor	9387053005
36	Motor Cover	9316568006
37	Crossflow Fan Assy	9387055009
38	Bearing C Assy	9306628017

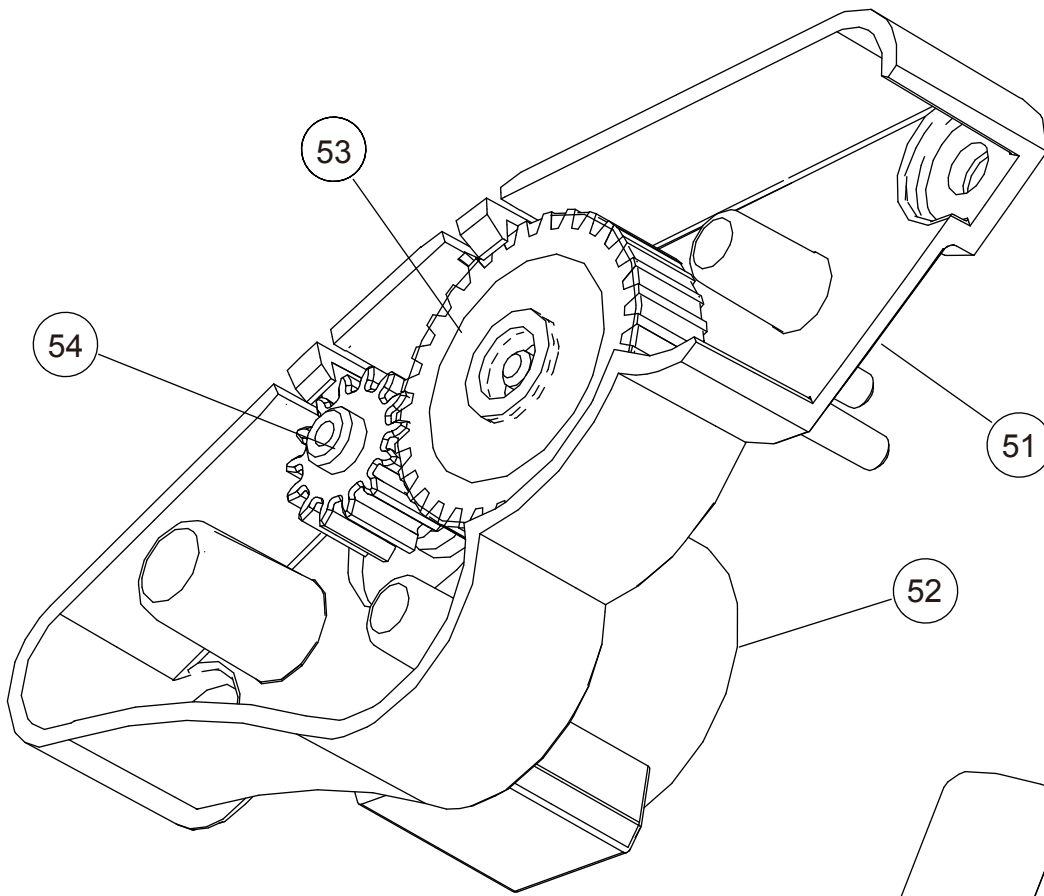


INDOOR UNIT  
ASGA18FUTB-U  
ASGA24FUTB-U

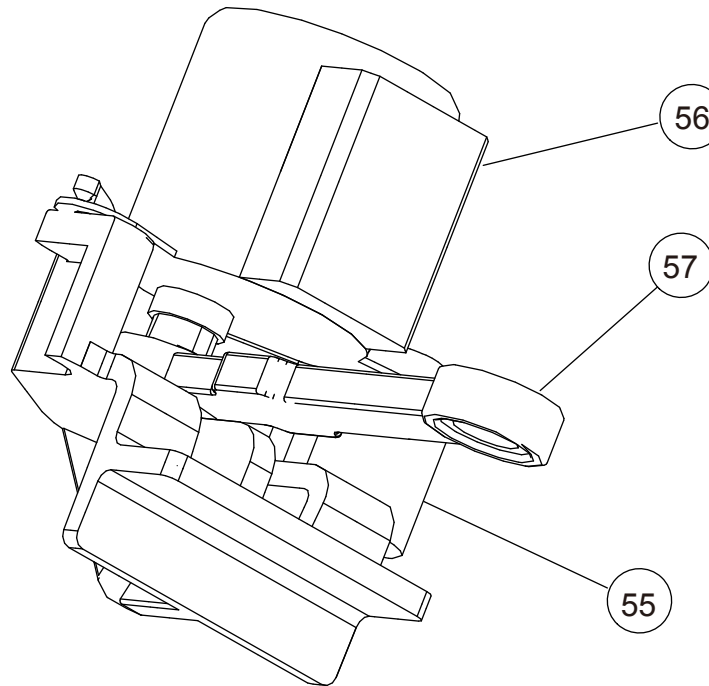
Ref	Description	Parts number
41	Cable Guide	9386997003
42	Gear Cover Assy	9387062007
43	Link Holder Assy	9387063004
44	Casing Assy	9387060034

INDOOR UNIT  
 ASGA18FUTB-U  
 ASGA24FUTB-U  
 Casing total assy



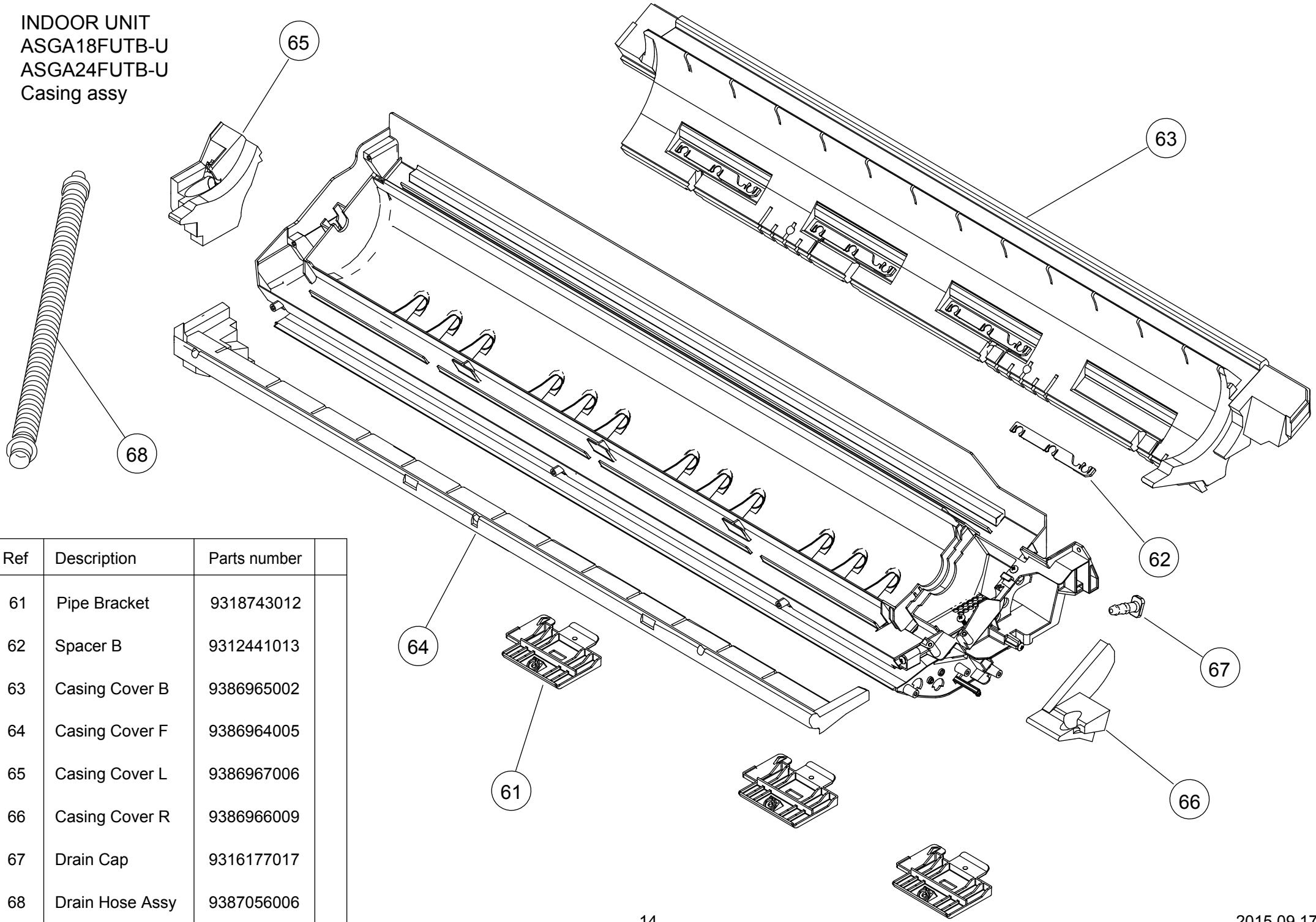


Ref	Description	Parts number
51	Gear Cover A	9386970006
52	Step Motor	9900384234
53	Louver Gear	9317648004
54	Gear A	9309994003
55	Link Holder	9315007018
56	Step Motor	9900139186
57	Link A	9386972000



INDOOR UNIT  
 ASGA18FUTB-U  
 ASGA24FUTB-U  
 Gear cover assy  
 Link holder assy

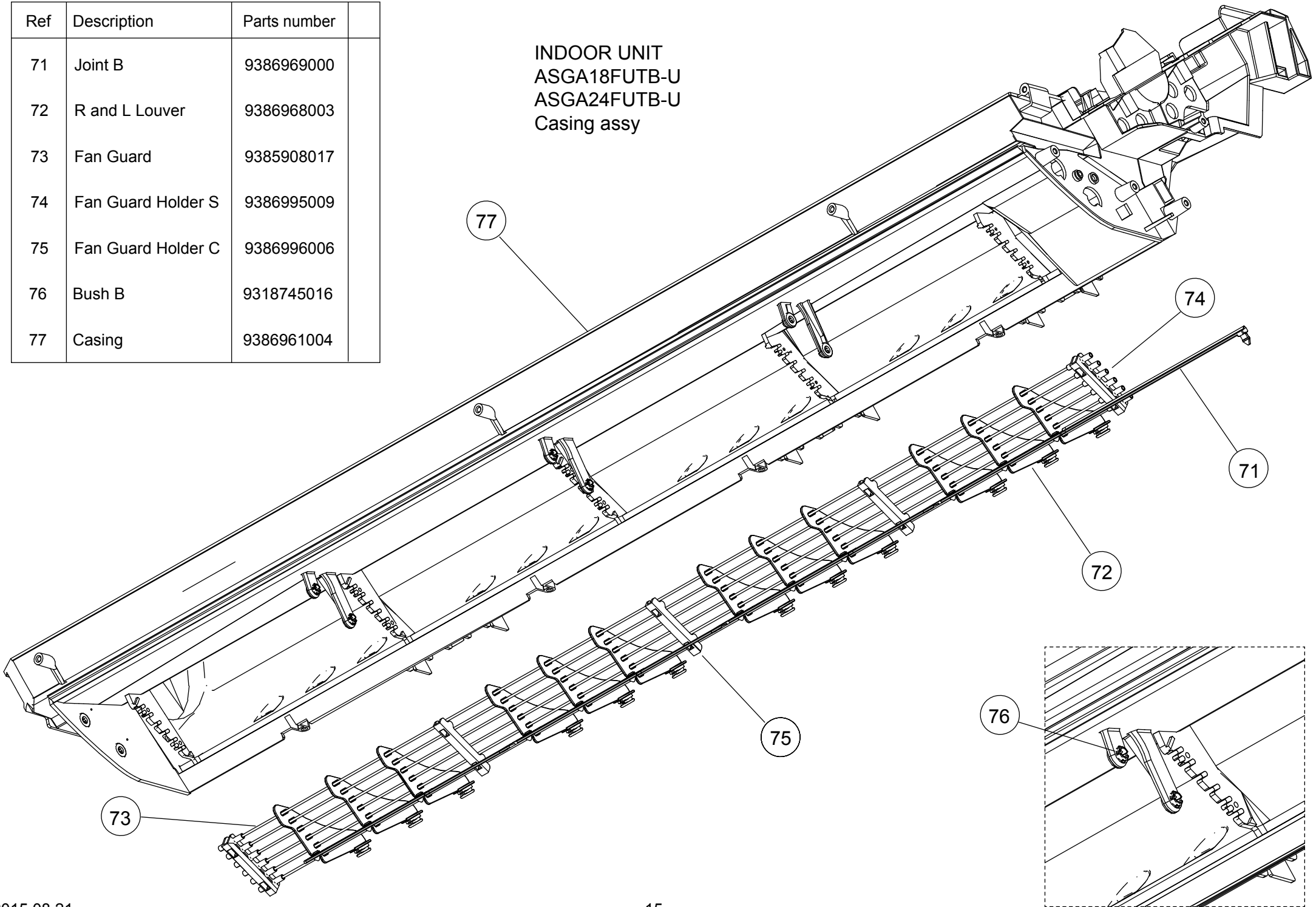
INDOOR UNIT  
 ASGA18FUTB-U  
 ASGA24FUTB-U  
 Casing assy



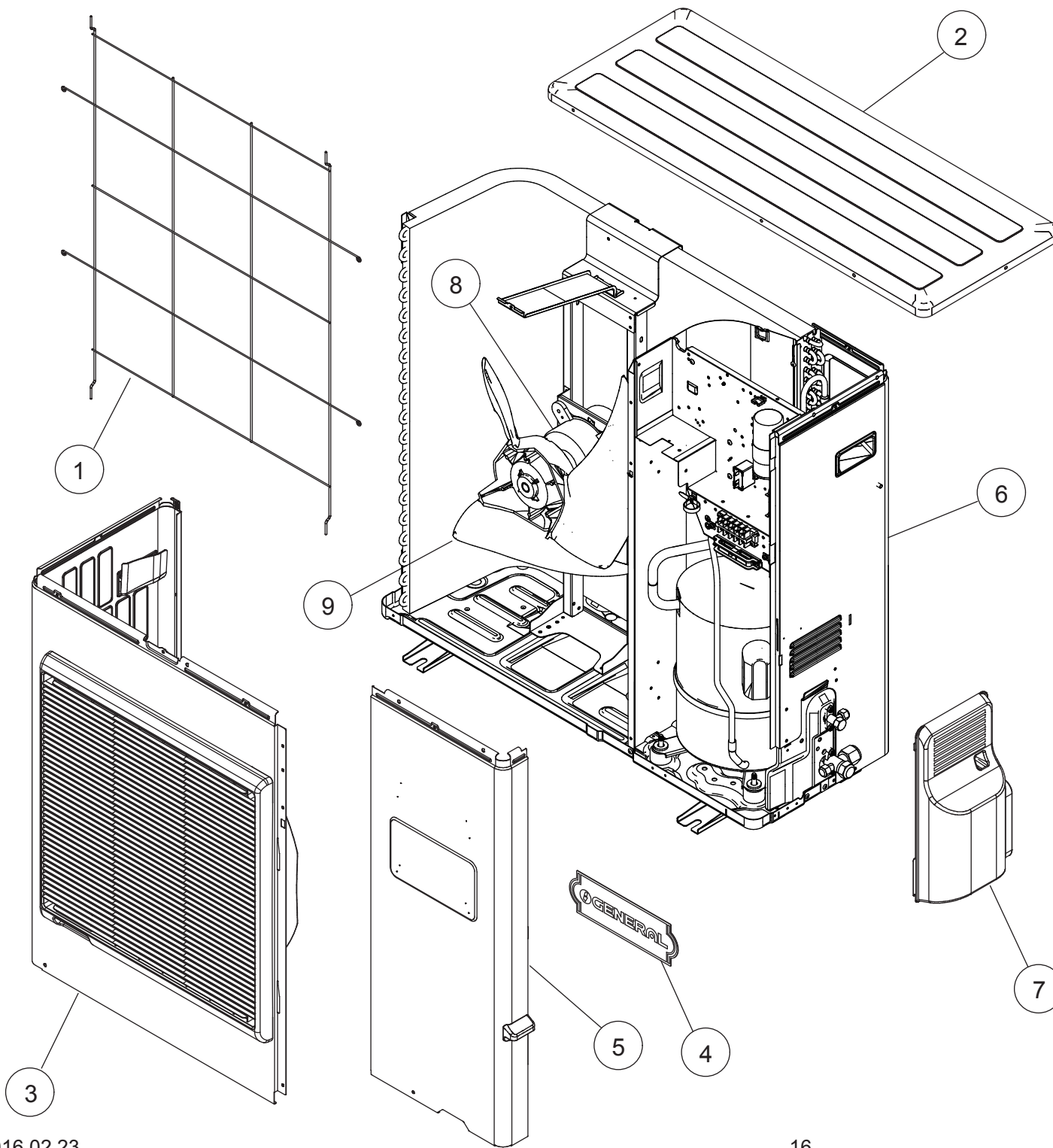
Ref	Description	Parts number
61	Pipe Bracket	9318743012
62	Spacer B	9312441013
63	Casing Cover B	9386965002
64	Casing Cover F	9386964005
65	Casing Cover L	9386967006
66	Casing Cover R	9386966009
67	Drain Cap	9316177017
68	Drain Hose Assy	9387056006

Ref	Description	Parts number
71	Joint B	9386969000
72	R and L Louver	9386968003
73	Fan Guard	9385908017
74	Fan Guard Holder S	9386995009
75	Fan Guard Holder C	9386996006
76	Bush B	9318745016
77	Casing	9386961004

INDOOR UNIT  
ASGA18FUTB-U  
ASGA24FUTB-U  
Casing assy



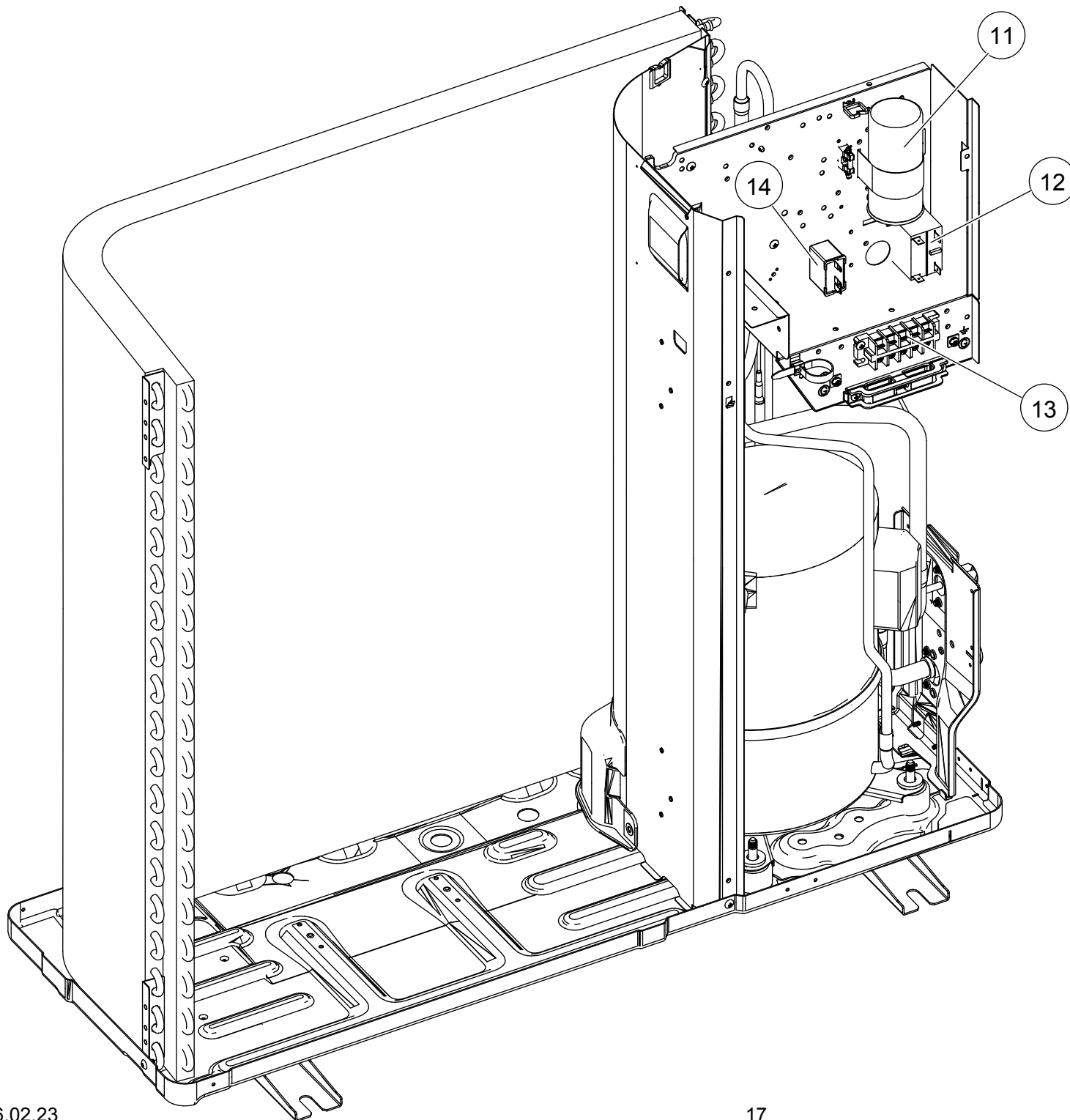




## PARTS

OUTDOOR UNIT  
AOGA18FUTBRU  
AOGA24FUTBRU

Ref.	Description	Part number
1	Protective Net	9375381011
2	Top Panel Sub Assy	9374417018
3	Front Panel Sub Assy	9374414079
4	Rear Emblem	9372171011
5	Service Panel Sub Assy	9385654013
6	Right Panel Sub Assy	9374416035
7	Valve Cover	9374174010
8	Fan Motor	9601671107
9	Propeller Fan Assy	9366378013

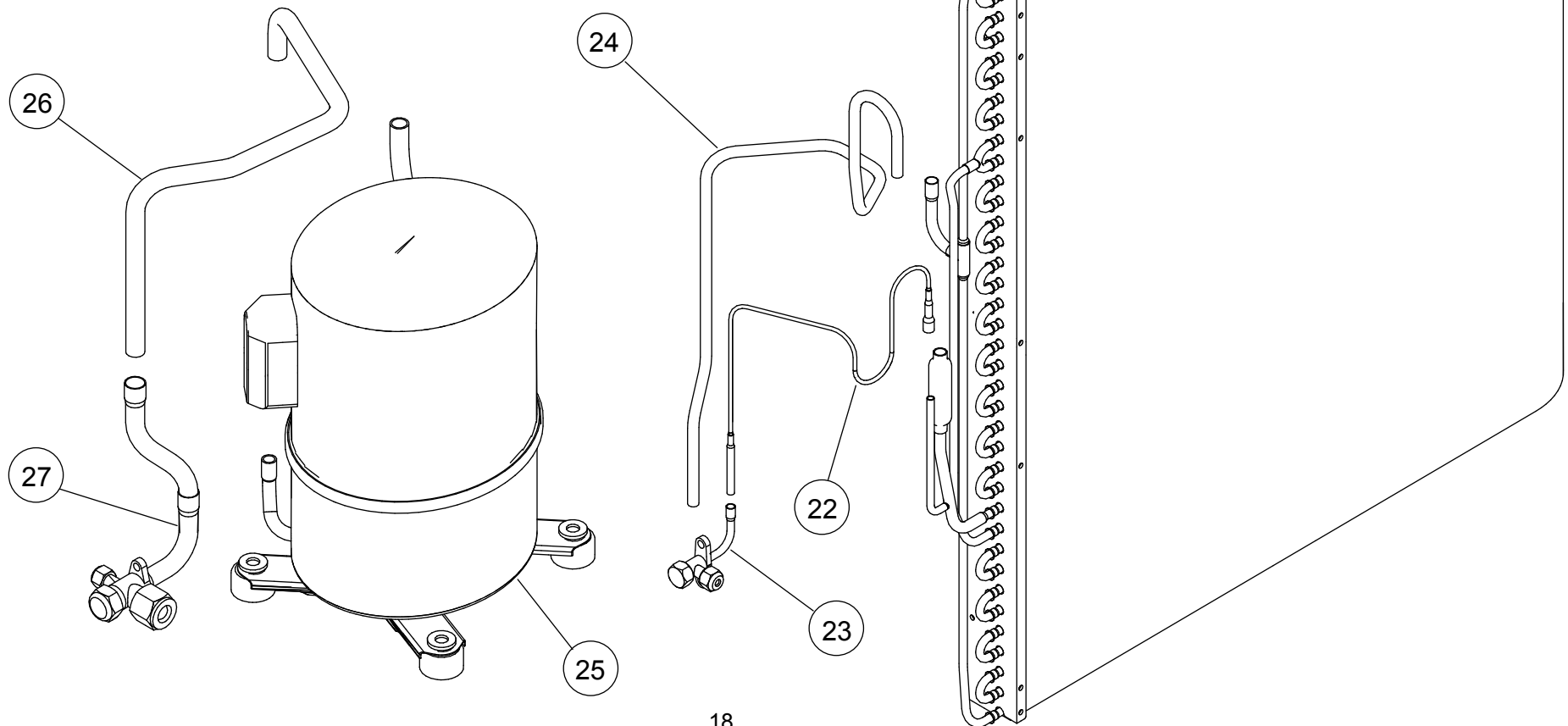


OUTDOOR UNIT  
 AOGA18FUTBRU  
 AOGA24FUTBRU

Ref.	Description	Part number	
11	Plastic Capacitor (18)	9900927011	
11	Plastic Capacitor (24)	9900927004	
12	Relay	9900074012	
13	Terminal	9900203023	
14	Fan Motor Capacitor	9900270063	

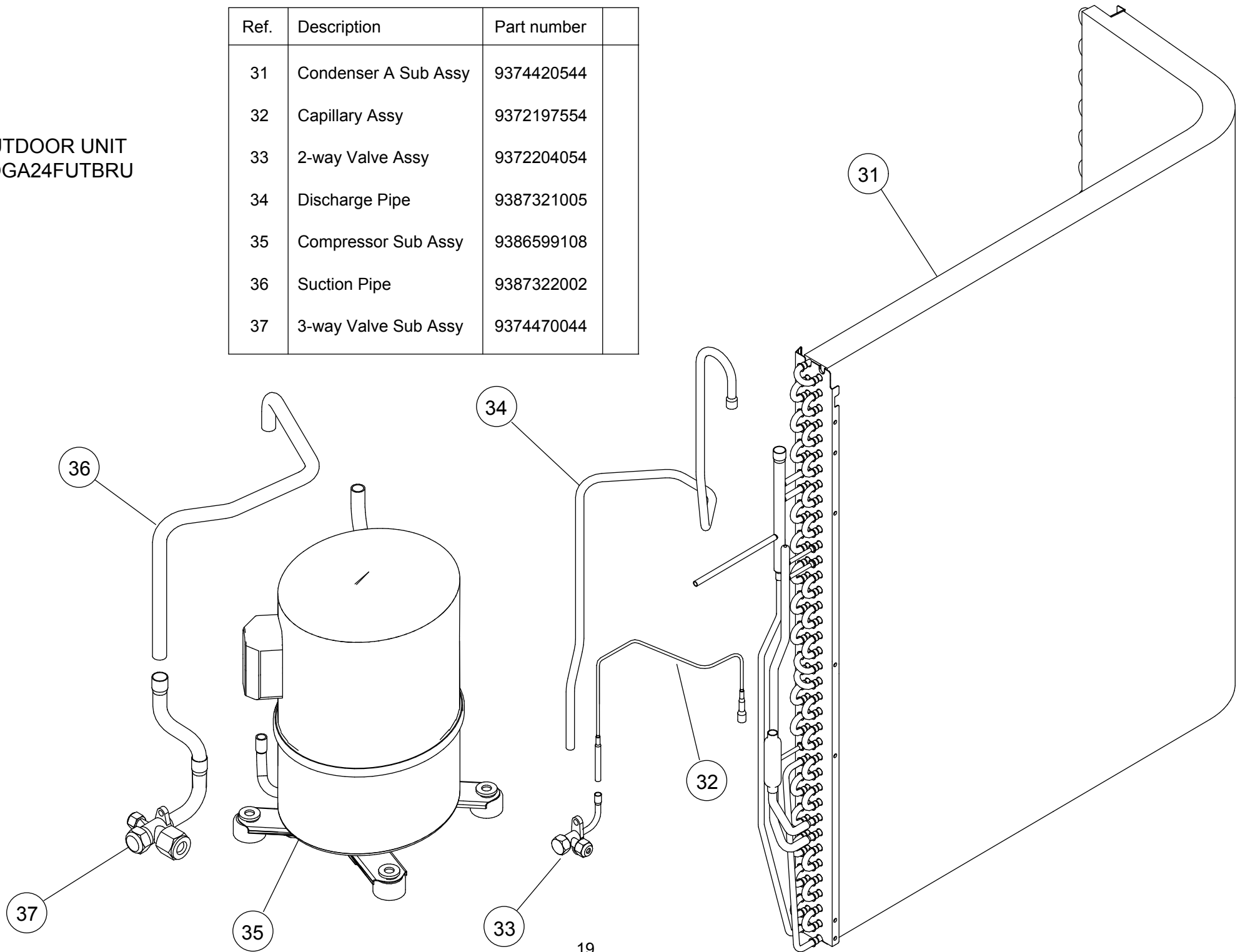
OUTDOOR UNIT  
AOGA18FUTBRU

Ref.	Description	Part number
21	Condenser A Sub Assy	9374420551
22	Capillary Assy	9372197561
23	2-way Valve Assy	9372204054
24	Discharge Pipe	9387330007
25	Compressor Sub Assy	9386599115
26	Suction Pipe	9387331004
27	3-way Valve Sub Assy	9374470044



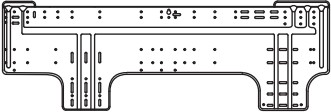


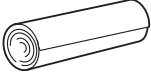


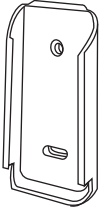

OUTDOOR UNIT  
AOGA24FUTBRU

Ref.	Description	Part number
31	Condenser A Sub Assy	9374420544
32	Capillary Assy	9372197554
33	2-way Valve Assy	9372204054
34	Discharge Pipe	9387321005
35	Compressor Sub Assy	9386599108
36	Suction Pipe	9387322002
37	3-way Valve Sub Assy	9374470044



# ACCESSORIES

## INDOOR UNIT

Parts	Q'ty	Parts	Q'ty
Wall hook bracket 9386990004 	1	Insulation (Drain hose) 9361756007 	1
Remote control 9387079050 <del>9387169003</del> 	1	Cloth tape 9310519004 	1
Battery (penlight) 0600185541 	2	Tapping screw (big) 0700076046 	8
Remote control holder 9387080001 	1	Tapping screw (small) 0700026072 	2

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