



**SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED type**

**SERVICE
MANUAL**

Models	Indoor unit	Outdoor unit
	ASG18ABAJ	AOG18ANAKH AOG18ANAK
	ASG18RBAJ	AOG18RNAKH
	ASG24ABAJ	AOG24ANAKH AOG24ANAK
	ASG24RBAJ	AOG24RNAKH
	ASG30RBAJ	AOG30RMADH

C O N T E N T S

SPECIFICATIONS 1
OUTLINE AND DIMENSIONS 2
REFRIGERANT SYSTEM DIAGRAM 4
ERROR CONTENTS 8
CIRCUIT DIAGRAM 10
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM 14
DISASSEMBLY ILLUSTRATION 18
PARTS LIST 35
STANDARD ACCESSORIES 39

S P E C I F I C A T I O N S

INDOOR UNIT		ASG18ABAJ	ASG18RBAJ	ASG24ABAJ	ASG24RBAJ	ASG30RBAJ
OUTDOOR UNIT		AOG18ANAKH AOG18ANAK	AOG18RNAKH	AOG24ANAKH AOG24ANAK	AOG24RNAKH	AOG30RMADH
TYPE		COOL	COOL & HEAT	COOL	COOL & HEAT	COOL & HEAT
COOLING CAPACITY	(kW)	5.40 - 5.50	5.30 - 5.40	6.80 - 6.90	6.60 - 6.80	7.80 - 8.00
HEATING CAPACITY		—	5.50 - 5.60	—	7.60 - 7.80	8.55 - 8.80

ELECTRICAL DATA

POWER SOURCE		(V)	220 - 240				
FREQUENCY		(Hz)	50				
RUNNING CURRENT	(A)	COOLING	8.4 - 8.4	8.5 - 8.5	12.2 - 12.8	12.0 - 12.2	13.7 - 13.5
		HEATING	—	7.8 - 7.8	—	12.0 - 12.4	14.5 - 14.4
INPUT WATTS	(kW)	COOLING	1.84 - 1.89	1.83 - 1.91	2.53 - 2.67	2.53 - 2.56	2.93 - 3.05
		HEATING	—	1.70 - 1.75	—	2.53 - 2.68	3.13 - 3.25
E.E.R.	(kW/kW)	COOLING	2.93 - 2.91	2.90 - 2.83	2.69 - 2.58	2.61 - 2.56	2.66 - 2.62
		HEATING	—	3.24 - 3.20	—	3.00 - 2.91	2.73 - 2.71
MOISTURE REMOVAL		(ℓ /hr)	2.0		2.5		3.0
AIR CIRCULATION		(m ³ /hr)	750 - 840		880 - 950		1,020 - 1,050

COMPRESSOR

TYPE		Hermetic type, Deposit electrode condenser, 2 poles, Single phase, Induction motor, Recipro				
CODE		2JS318D5DA02		2JS438D5DA02		NHT52VAAT
REFRIGERANT	R-22 (g)	1,300	1,900	1,950	2,200	2,450

FAN MOTOR

POWER SOURCE		(V)	220 - 240			
INDOOR UNIT	TYPE	MFA-30HTT				
	HI-SPEED (r.p.m.)	990 - 1,080		1,170 - 1,230		1,290 - 1,320
	MED-SPEED (r.p.m.)	840 - 940		970 - 1,070		1,140 - 1,210
	LO-SPEED (r.p.m.)	710 - 810		830 - 930		930 - 1,030
OUTDOOR UNIT	TYPE	MFB-24JTT	MFB-24JTB	MFB-24JTT	MFB-24JTB	MFB-30NTAT
	HI-SPEED (r.p.m.)	800				730
	LO-SPEED (r.p.m.)	—	400	—	400	450

DIMENSIONS

INDOOR UNIT	H x W x D	320 x 1,120 x 220			
OUTDOOR UNIT	(mm)	650 x 830 x 320			900 x 900 x 350

WEIGHT

INDOOR UNIT	GROSS / NET	22 / 16				
OUTDOOR UNIT	(kg)	55 / 51	60 / 56	63 / 59	64 / 60	92 / 80

REFRIGERANT CHARGE (R-22)

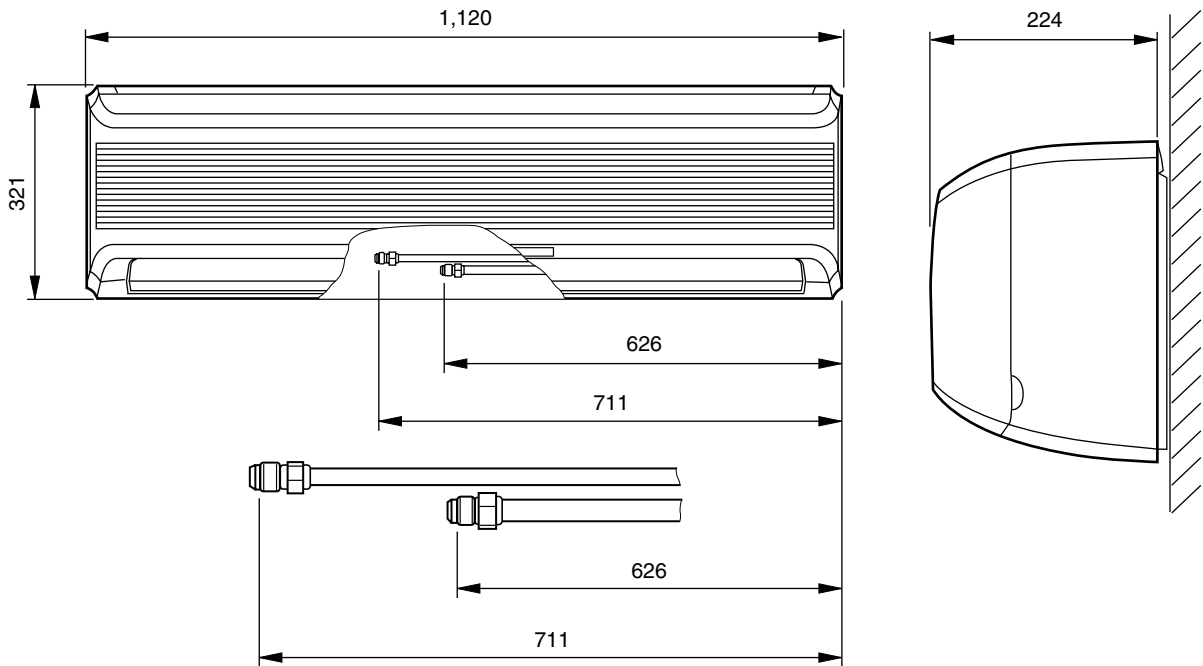
PIPE LENGTH		7.5 m (25 ft)	10 m (33 ft)	15 m (49 ft)	20 m (66 ft)	25 m (82 ft)	Additional refrigerant
FULL CHARGE AMOUNT	ASG18ABAJ	1,300 g (45.9 oz)	1,350 g (47.6 oz)	1,450 g (51.2 oz)	1,550 g (54.7 oz)	—	20 g (0.71 oz)/3.3 ft (1 m) (over 7.5 m)
	ASG18RBAJ	1,900 g (67.0 oz)	2,000 g (70.6 oz)	2,200 g (77.6 oz)	2,400 g (84.7 oz)	—	40 g (1.41 oz)/3.3 ft (1 m) (over 7.5 m)
	ASG24ABAJ	1,950 g (68.8 oz)	2,000 g (70.6oz)	2,100 g (74.1 oz)	2,200 g (77.6 oz)	—	20 g (0.71 oz)/3.3 ft (1 m) (over 7.5 m)
	ASG24RBAJ	2,200 g (77.6 oz)	2,300 g (81.1 oz)	2,500 g (88.2 oz)	2,700 g (95.2 oz)	—	40 g (1.41 oz)/3.3 ft (1 m) (over 7.5 m)
	ASG30RBAJ	2,450 g (86.4 oz)	2,550 g (90.0 oz)	2,750 g (97.0 oz)	2,950 g (104.1 oz)	3,150 g (111.1 oz)	40 g (1.41 oz)/3.3 ft (1 m) (over 7.5 m)

OUTLINE AND DIMENSIONS

INDOOR UNIT

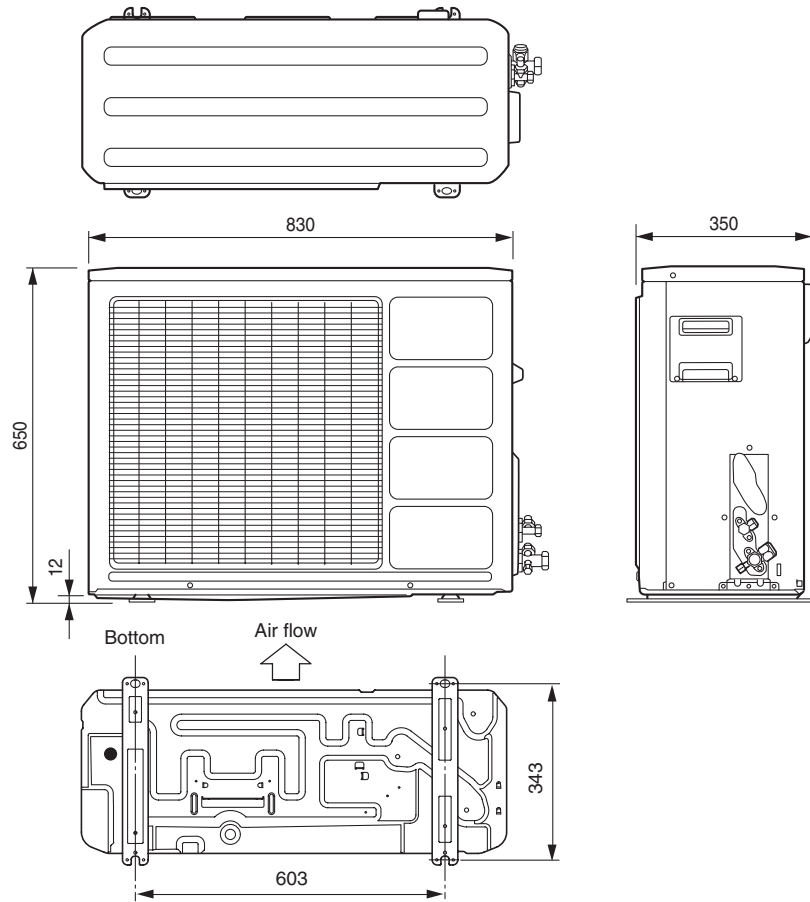
Models : ASG18ABAJ, ASG18RBAJ
ASG24ABAJ, ASG24RBAJ
ASG30RBAJ

Unit : mm

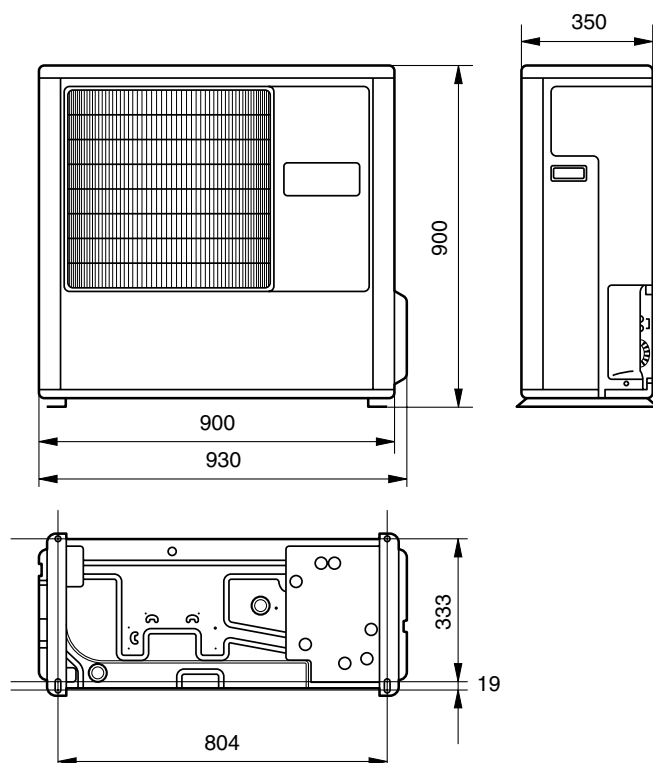


OUTDOOR UNIT

**Models : AOG18ANAKH, AOG18ANAK, AOG18RNAKH
AOG24ANAKH, AOG24ANAK, AOG24RNAKH**

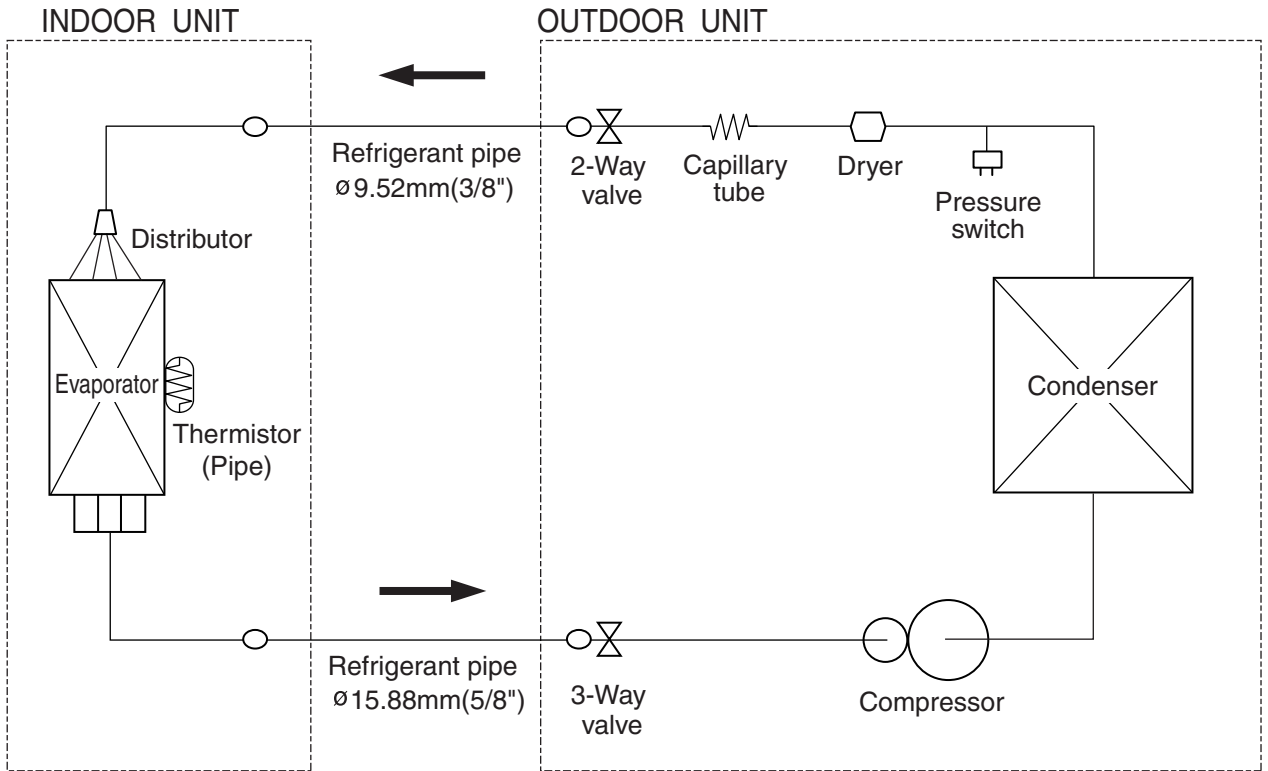


Model : AOG30RMADH

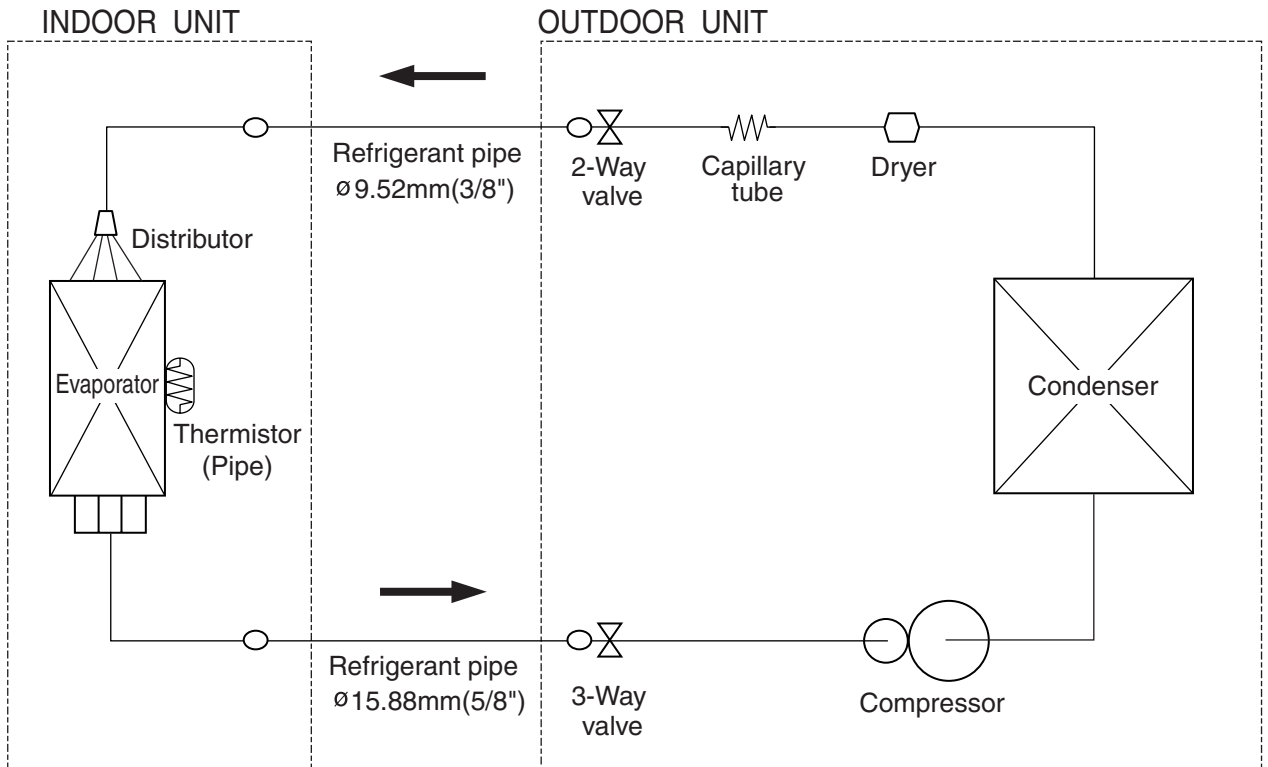


REFRIGERANT SYSTEM DIAGRAM

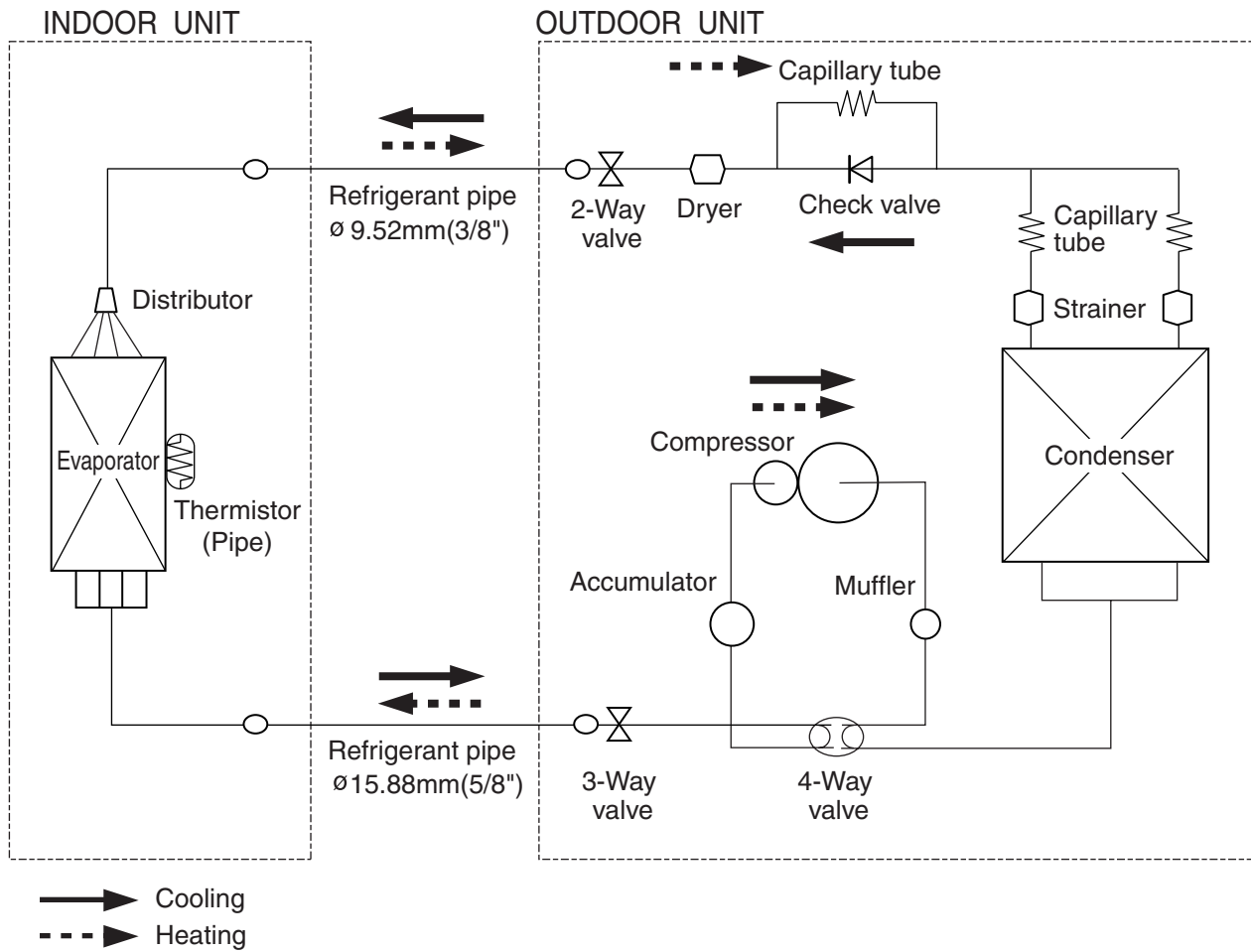
Models : ASG18ABAJ / AOG18ANAKH



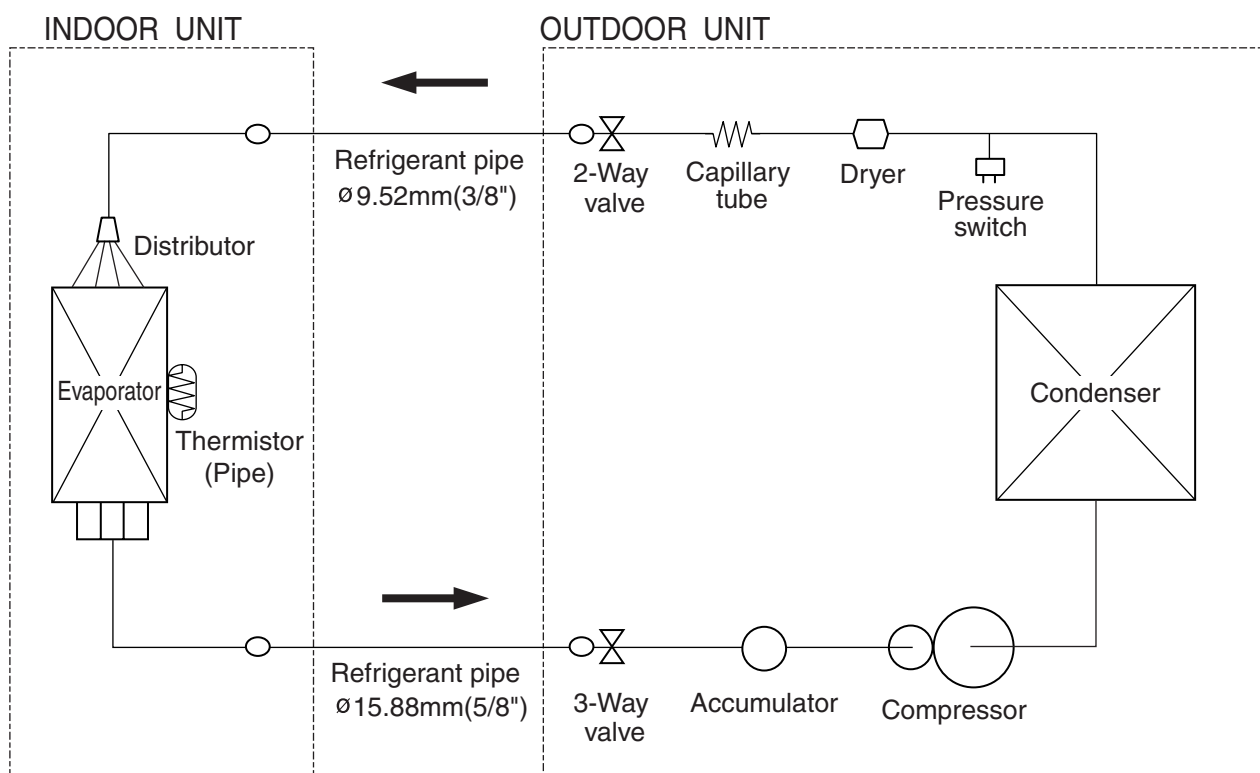
Models : ASG18ABAJ / AOG18ANAK



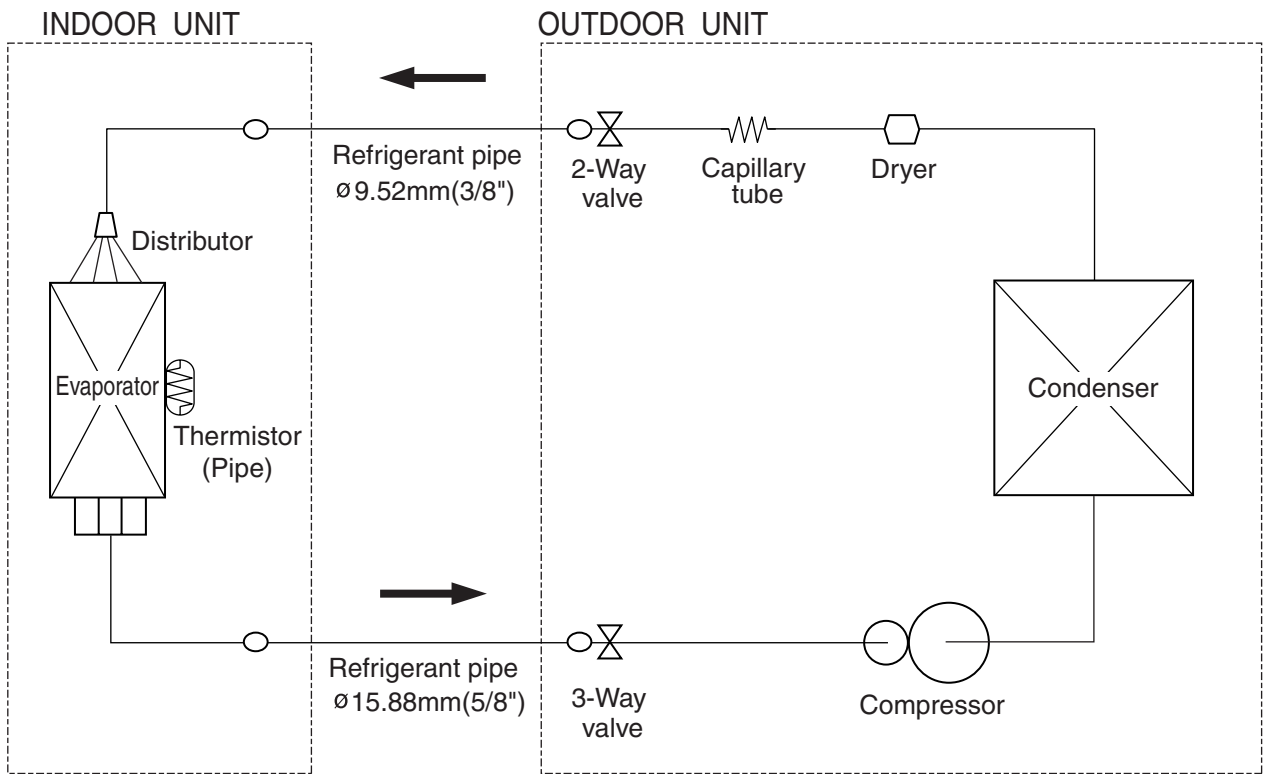
Models : ASG18BAJ / AOG18NAKH



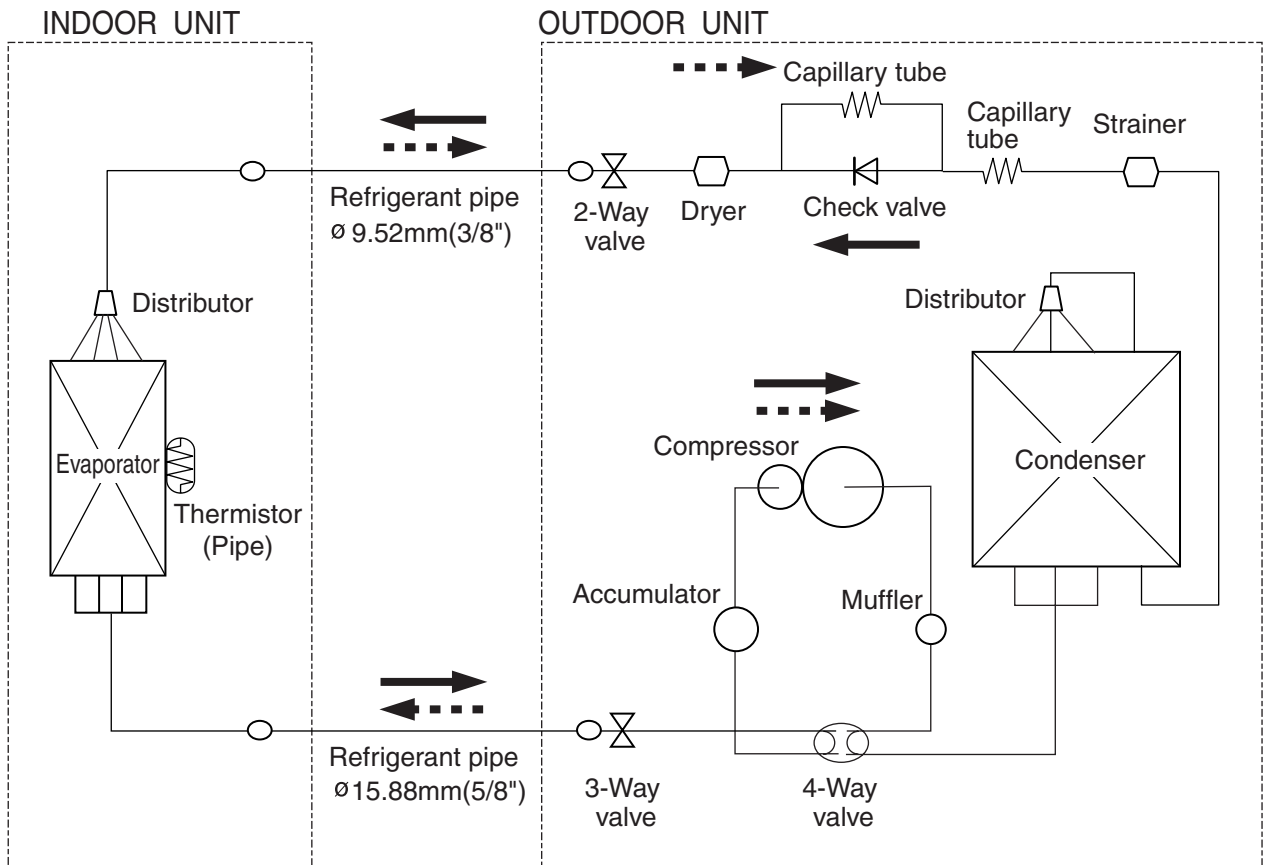
Models : ASG24BAJ / AOG24NAKH



Models : ASG24ABAJ / AOG24ANAK

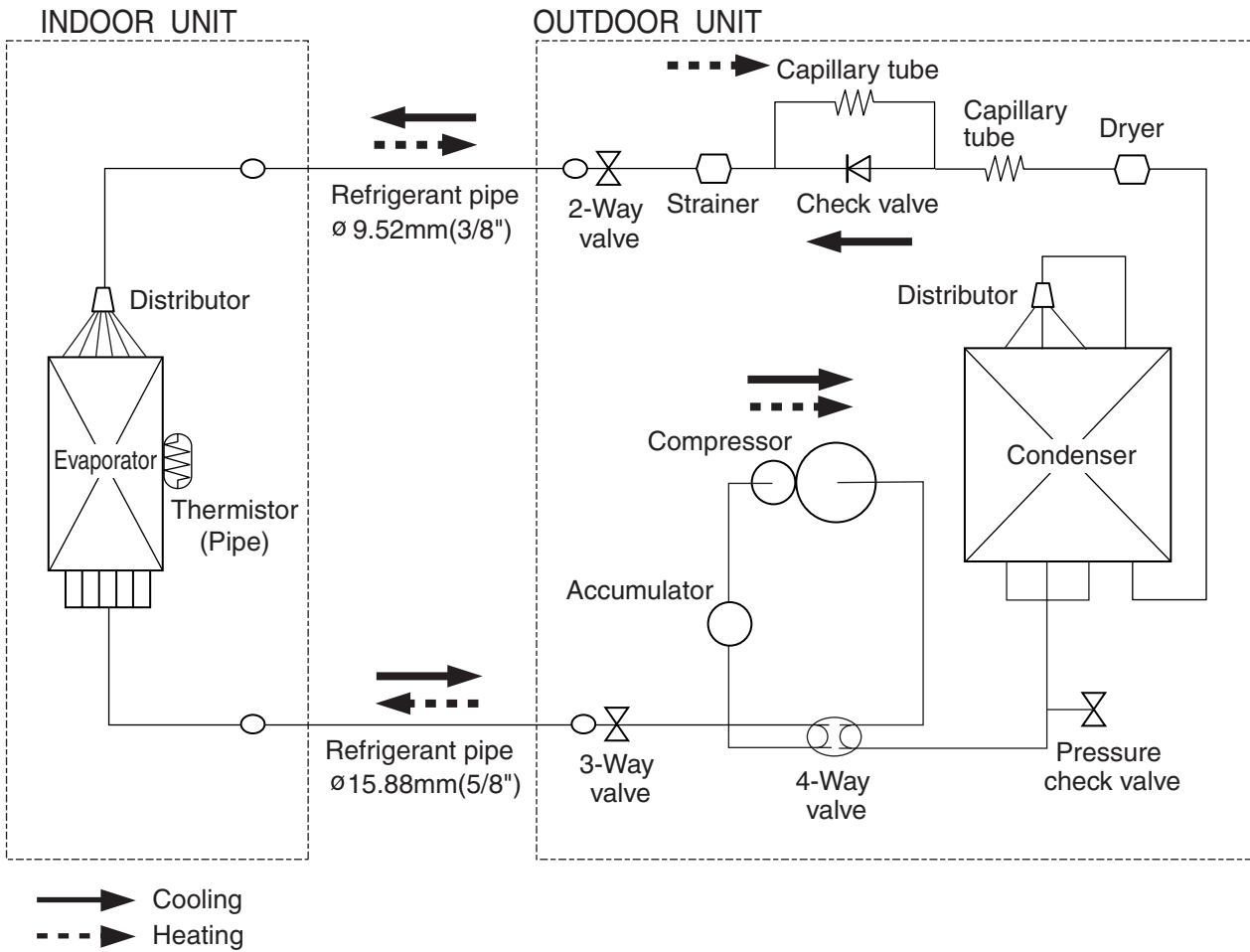


Models : ASG24RBAJ / AOG24RNAKH



 Cooling
 Heating

Models : ASG30RBAJ / AOG30RMADH



E R R O R C O N T E N T S

● Error

The OPERATION, TIMER and SWING lamps operate as follows according to the error contents.

○ : Fast flashing ● : Slow flashing – : Off

Error contents	Error display		
	OPERATION (RED)	TIMER (GREEN)	SWING (ORANGE)
Indoor unit circuit board error	○	○	–
Indoor unit room temperature sensor wire opened	2 times ●	○	–
Indoor unit room temperature sensor wire short circuited	2 times ●	○	○
Indoor unit piping sensor wire opened	3 times ●	○	–
Indoor unit piping sensor wire short circuited	3 times ●	○	○
Indoor unit fan error	6 times ●	○	–

Thermistor resistance values <Indoor unit side>

1) Room temperature thermistor (TH_{IA})

Room temperature (°C)	0	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5	30
Resistance value (kΩ)	33.6	29.5	25.9	22.8	20.2	17.9	15.8	14.1	12.5	11.2	10.0	9.0	8.0

Room temperature (°C)	32.5	35	37.5	40	42.5	45	47.5	50
Resistance value (kΩ)	7.2	6.5	5.9	5.3	4.8	4.3	3.9	3.6

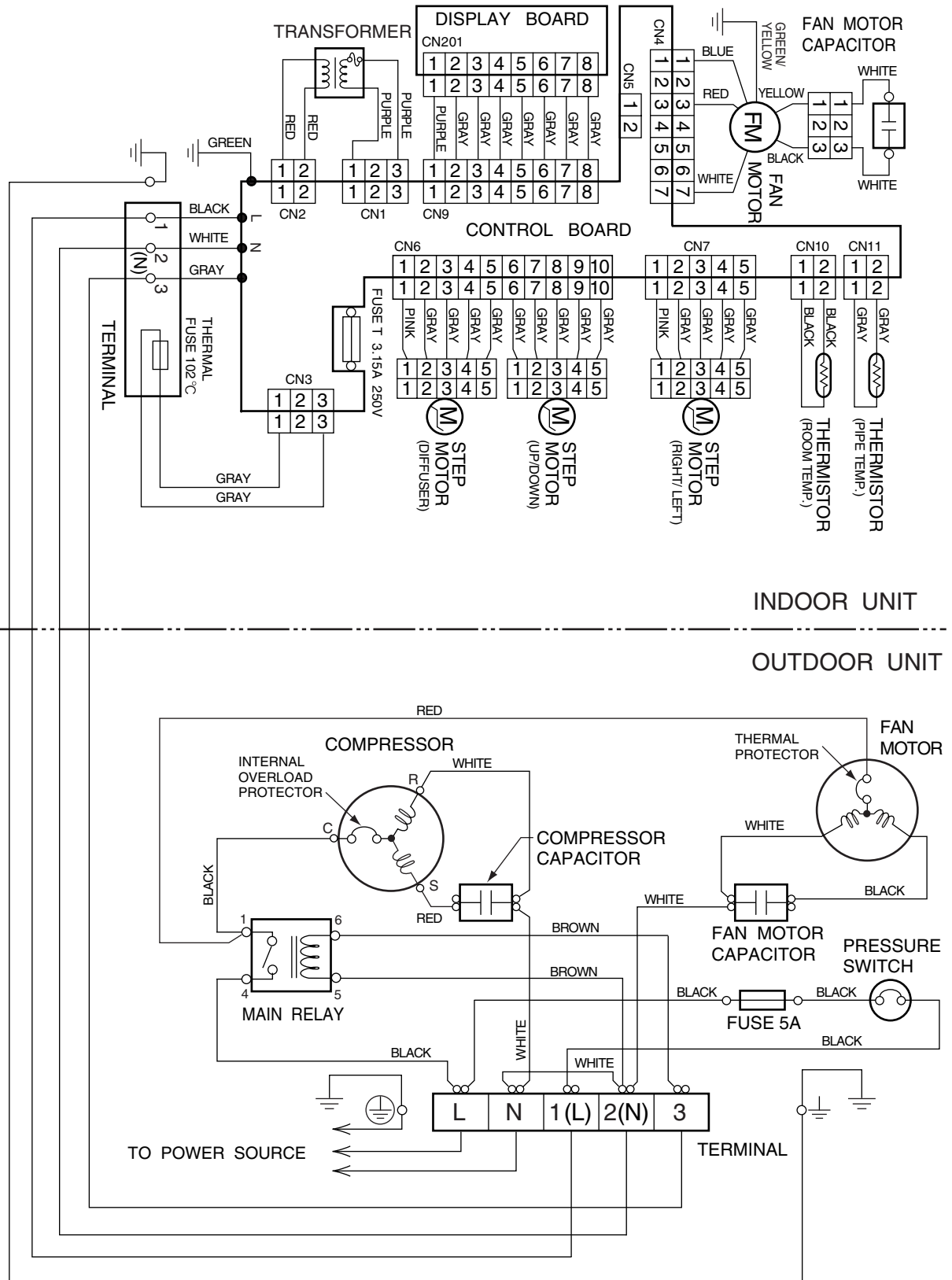
2) Indoor heat exchanger temperature thermistor (TH_{HM}, TH_{HI})

Heat exchanger temperature (°C)	0	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5	30
Resistance value (kΩ)	176.0	153.5	134.2	117.6	103.3	91.0	80.3	71.0	62.9	55.9	49.7	44.3	39.6

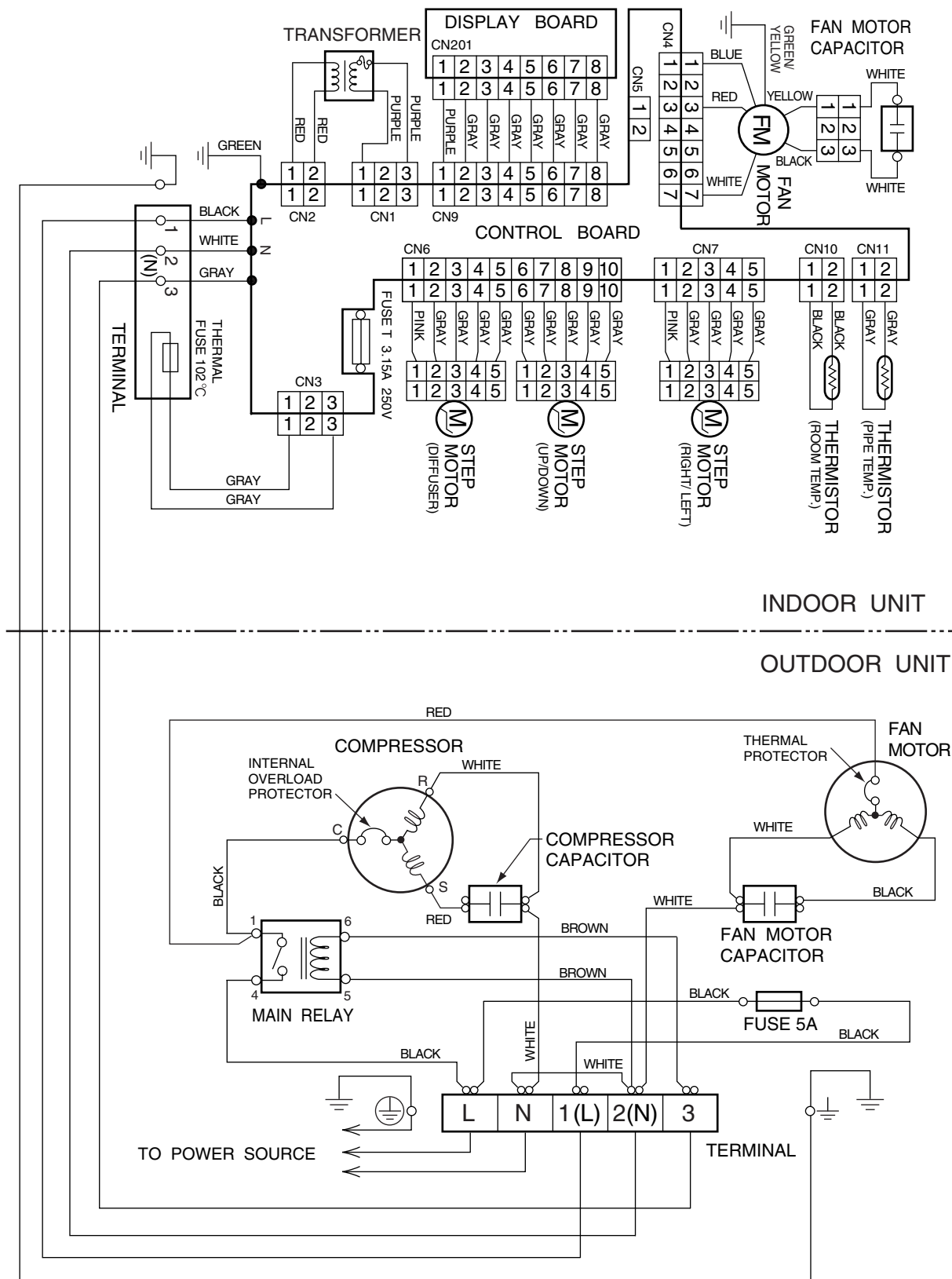
Heat exchanger temperature (°C)	32.5	35	37.5	40	42.5	45	47.5	50	52.5	55	57.5	60
Resistance value (kΩ)	35.4	31.7	28.5	25.6	23.1	20.8	18.8	17.1	15.5	14.1	12.8	11.6

C I R C U I T D I A G R A M

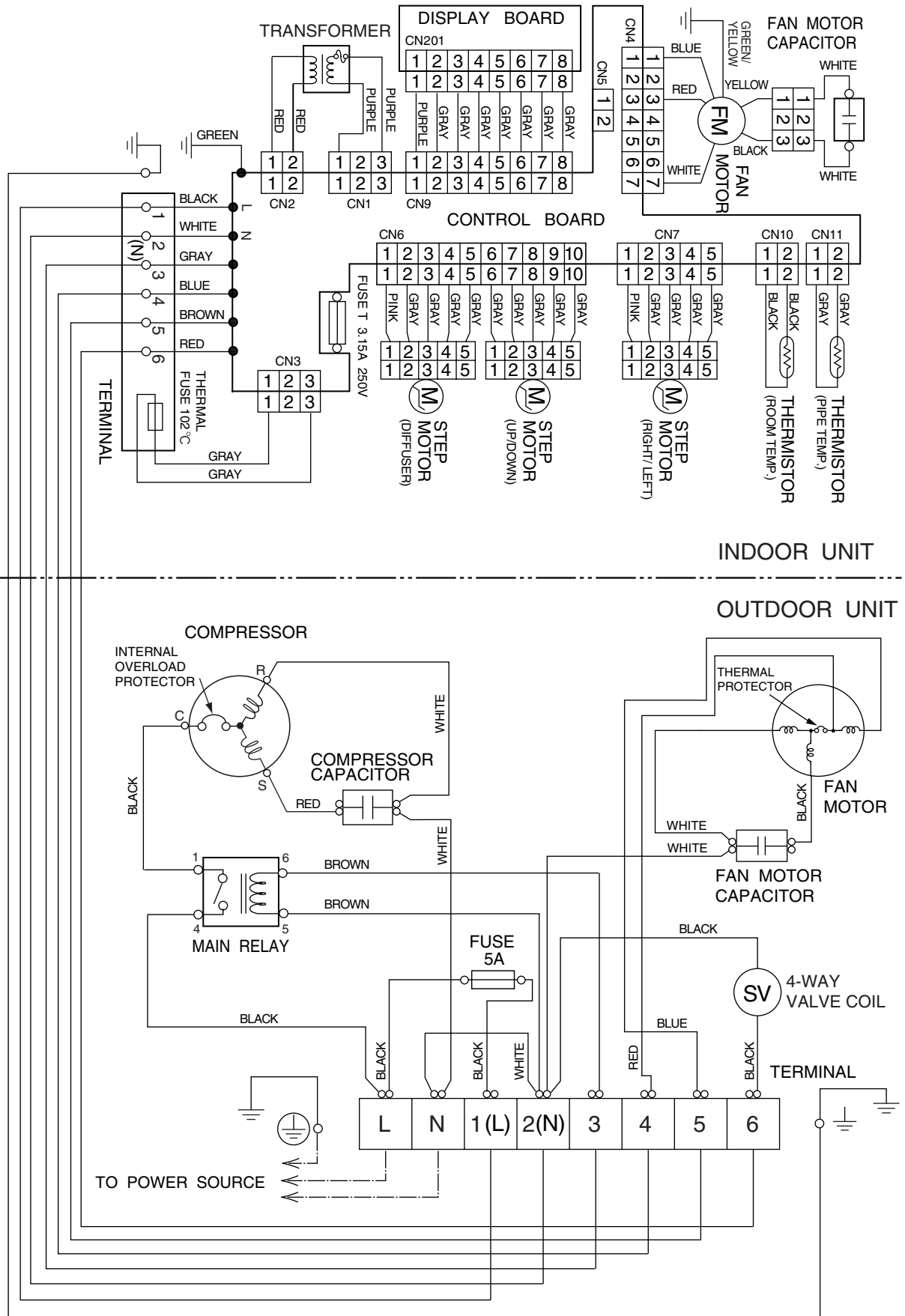
**Models : ASG18ABAJ / AOG18ANAKH
ASG24ABAJ / AOG24ANAKH**



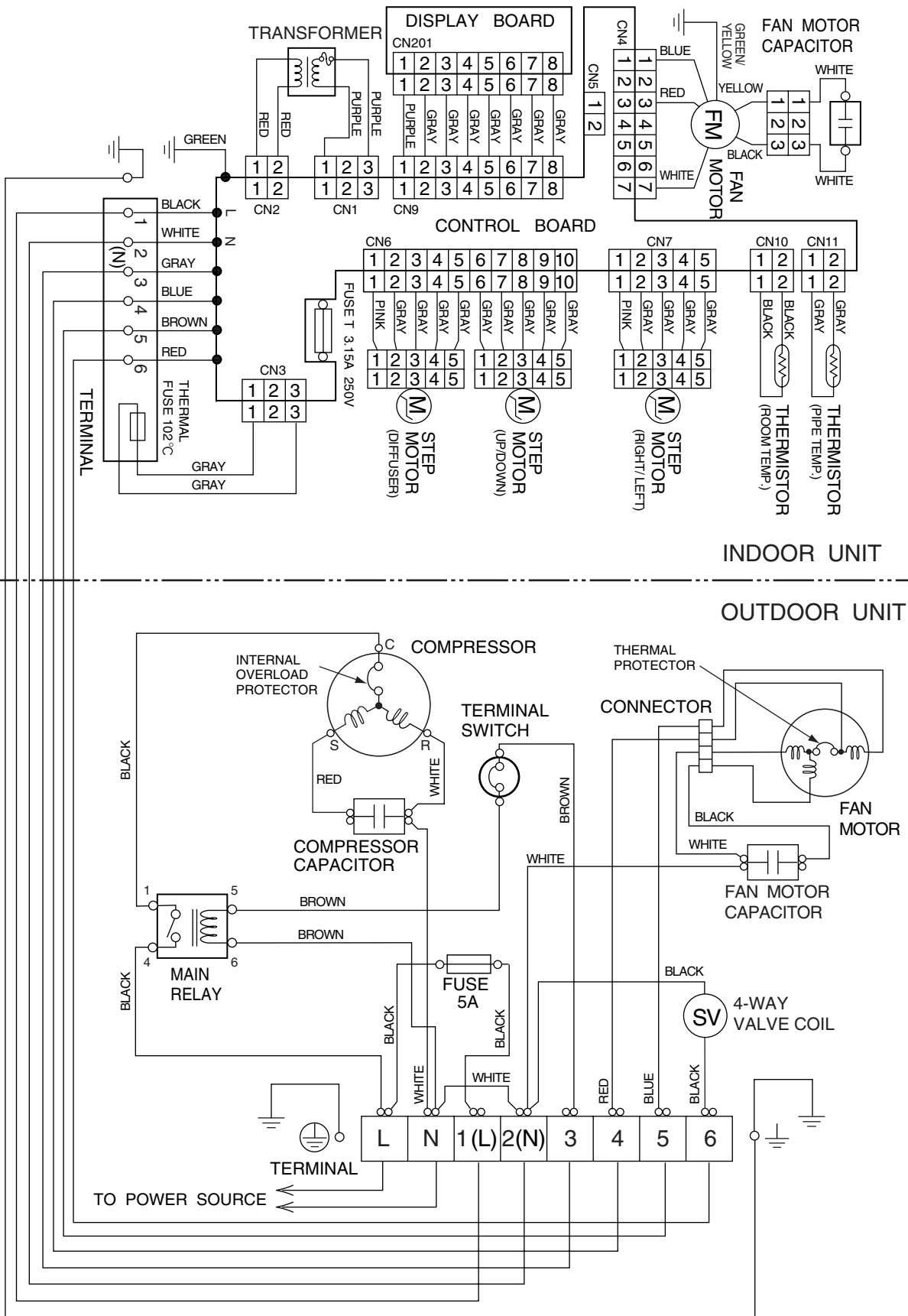
Models : ASG18ABAJ / AOG18ANAK
 ASG24ABAJ / AOG24ANAK



Models : ASG18RBAJ / AOG18RNAKH
 ASG24RBAJ / AOG24RNAKH

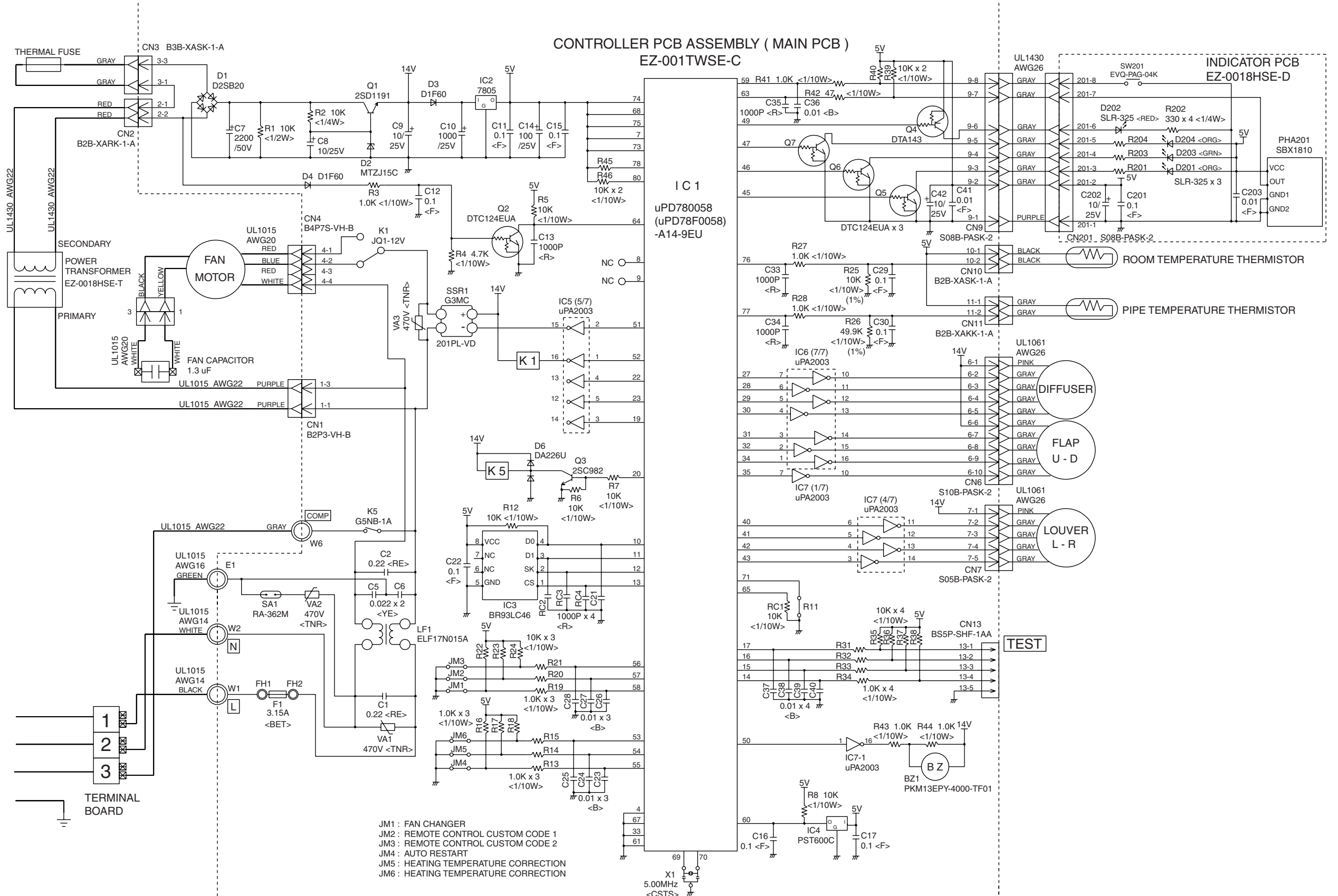


Models : ASG30RBAJ / AOG30RMADH

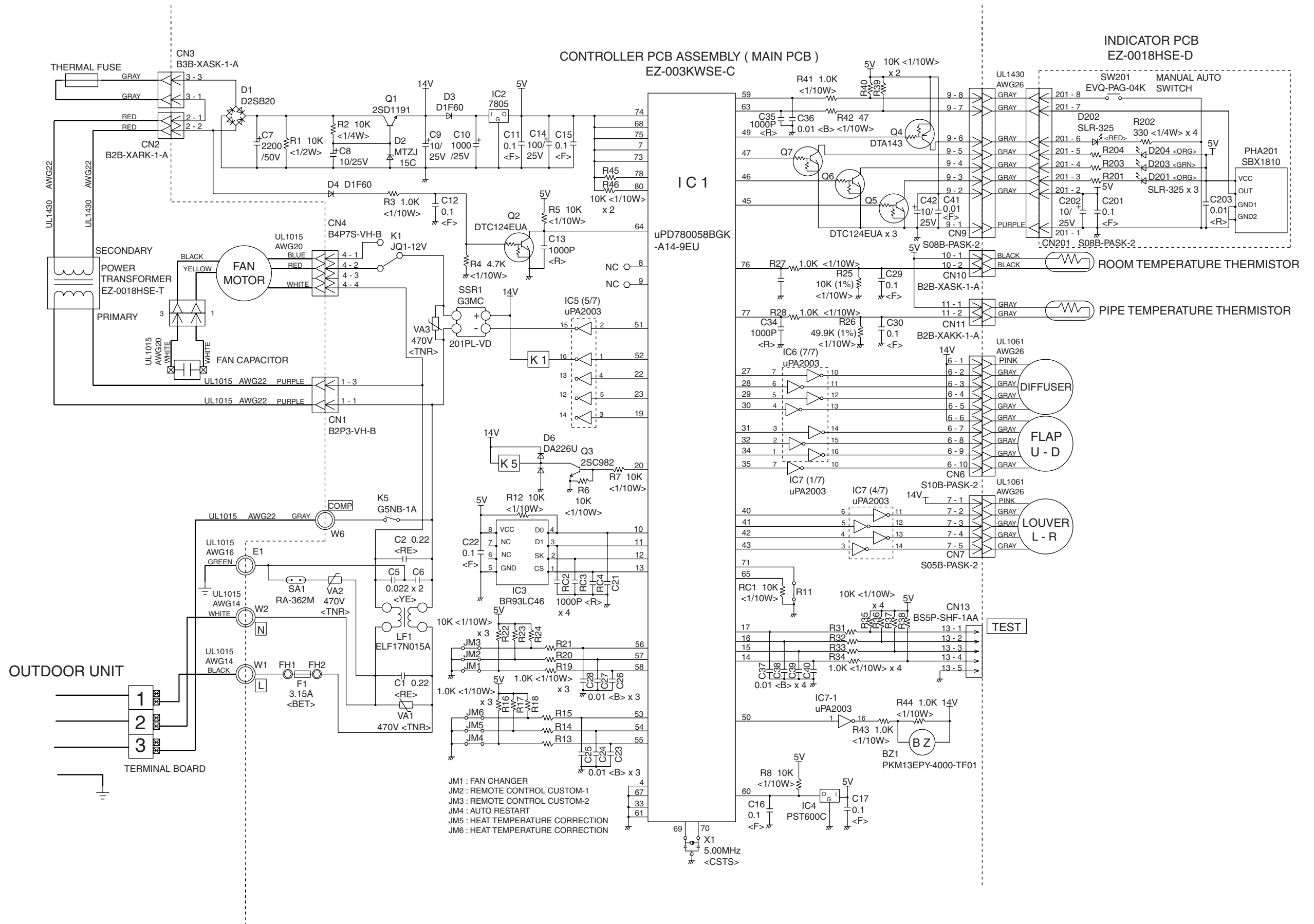


INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

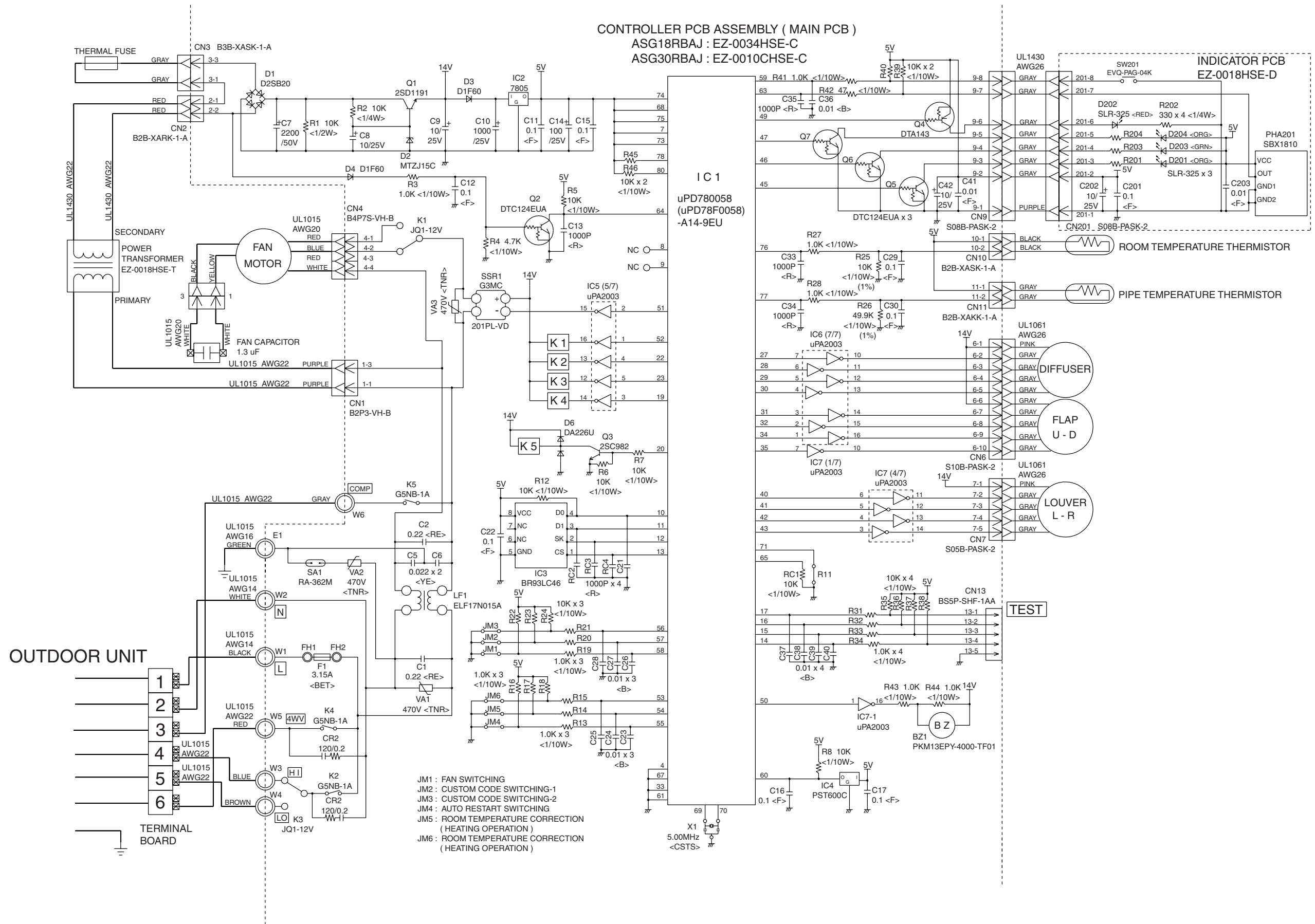
Model : ASG18ABAJ



Model : ASG24ABAJ

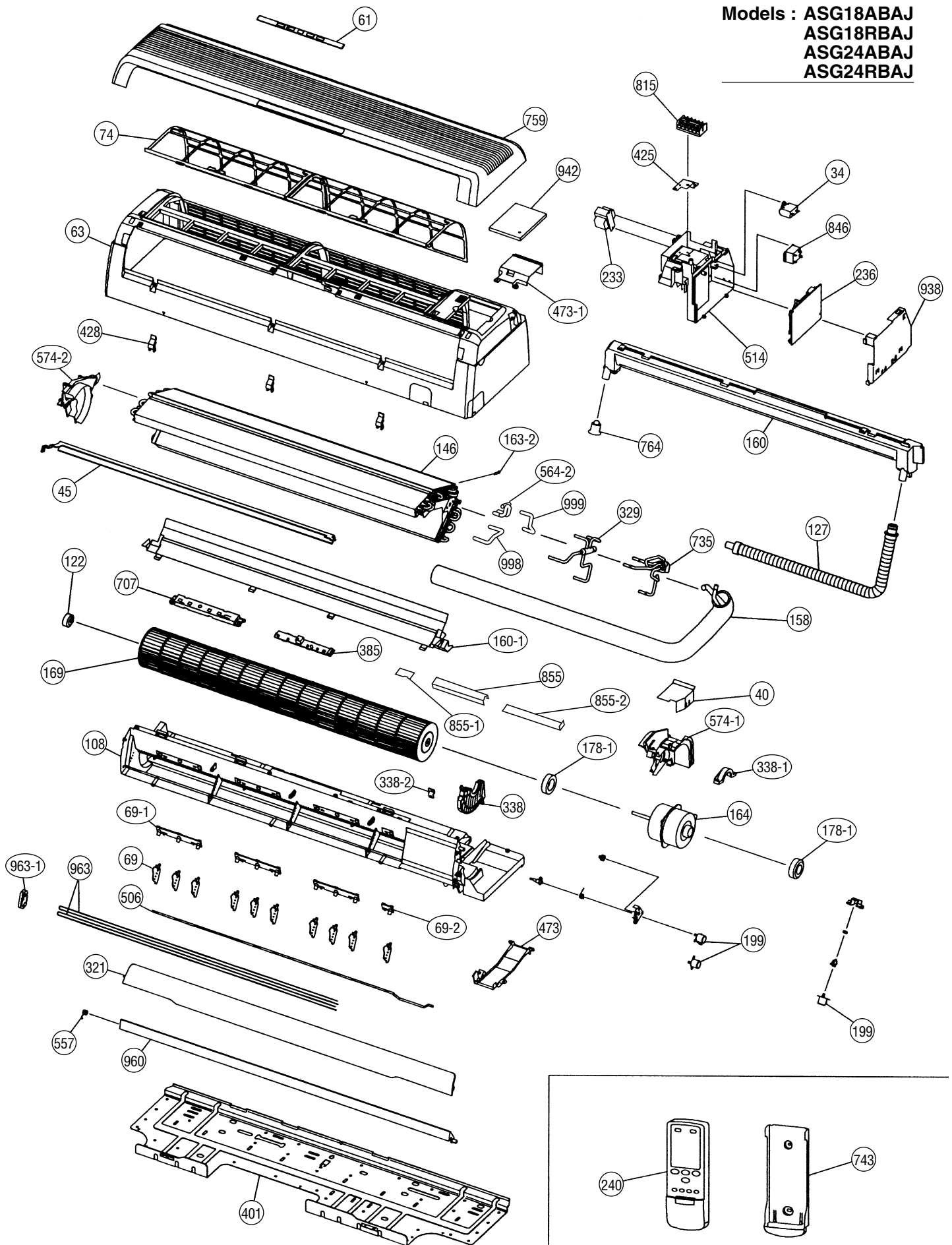


Models : ASG18BAJ
ASG30BAJ

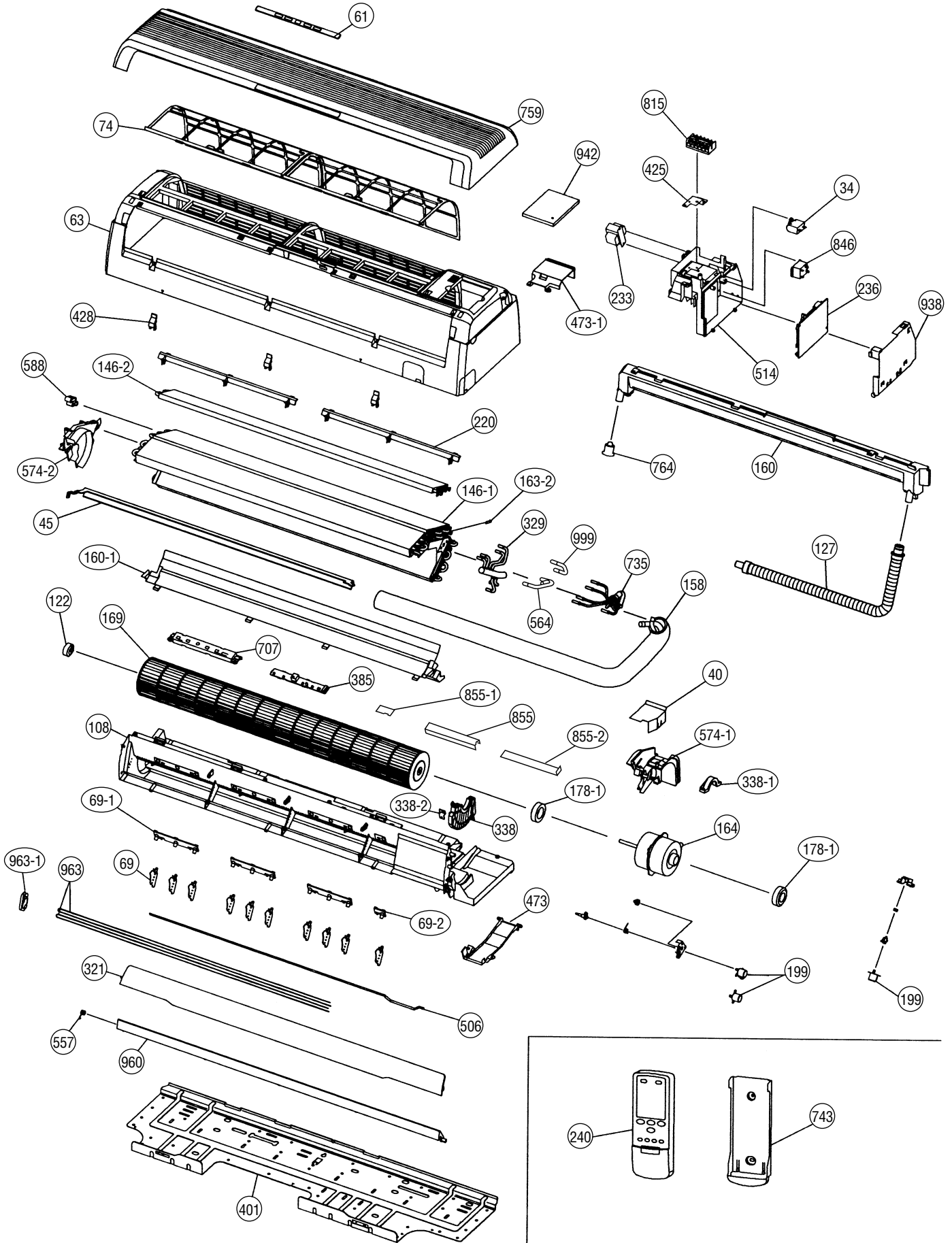


DISASSEMBLY ILLUSTRATION

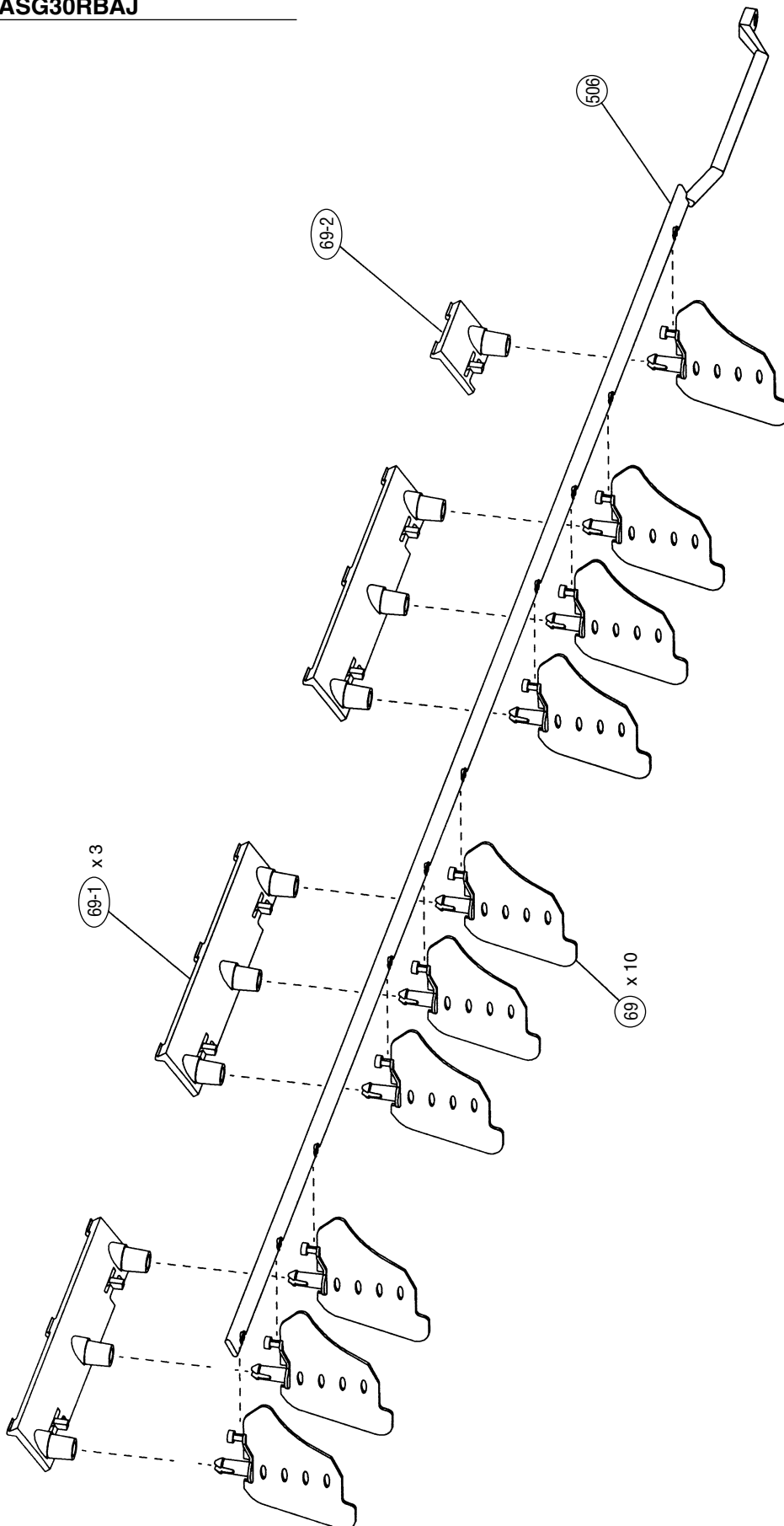
Models : ASG18ABAJ
 ASG18RBAJ
 ASG24ABAJ
 ASG24RBAJ



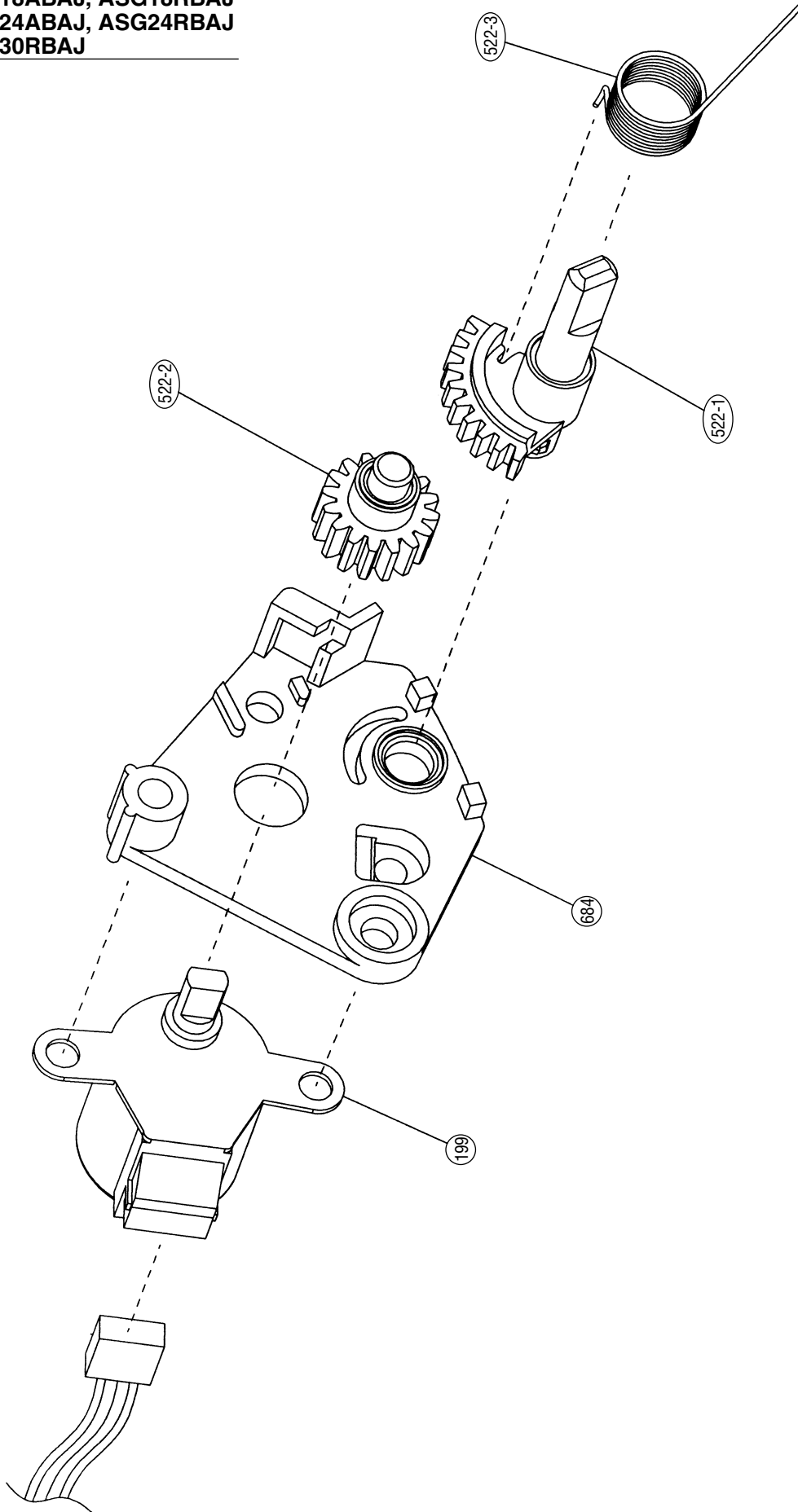
Model : ASG30BAJ



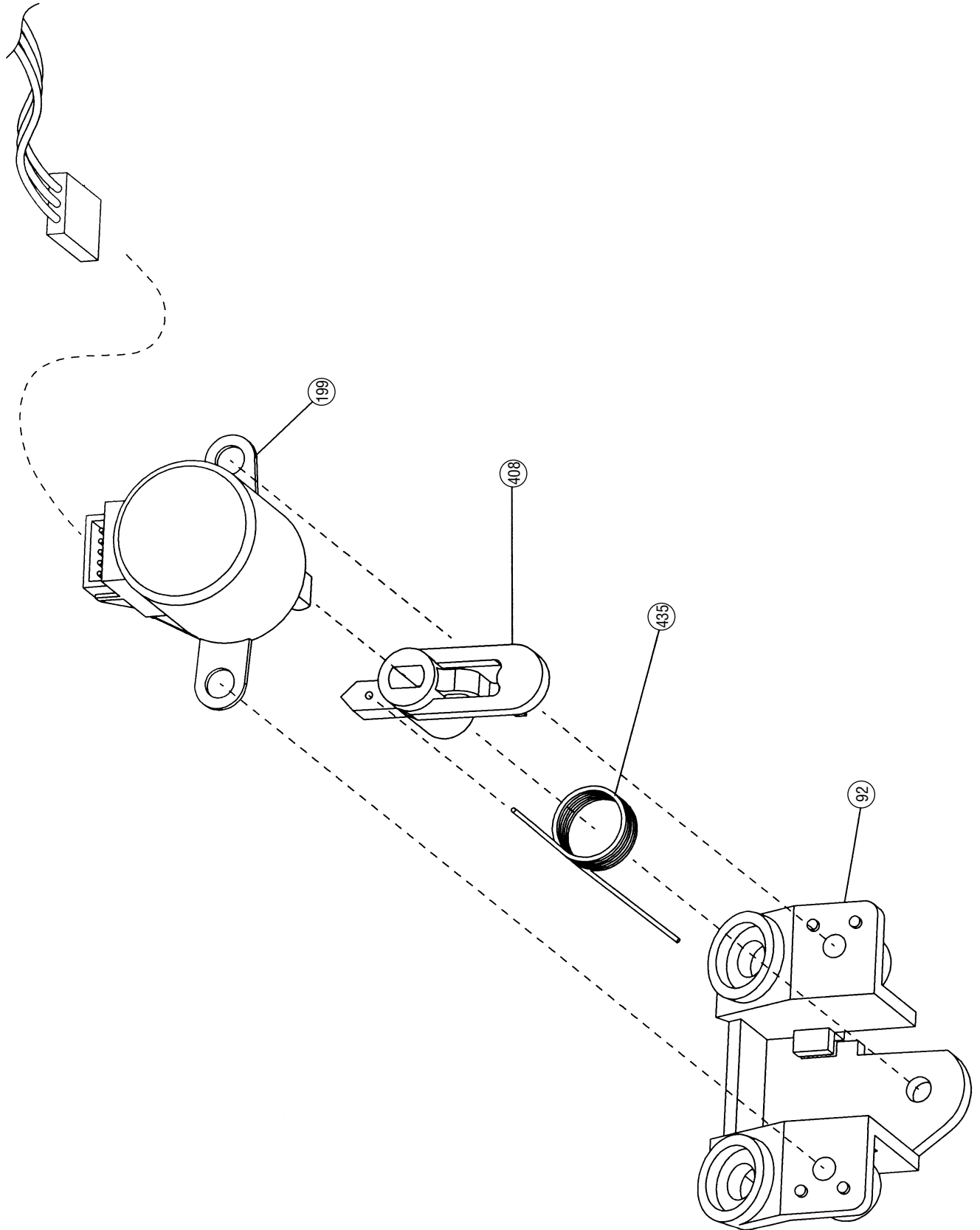
Models : ASG18ABAJ, ASG18RBAJ
ASG24ABAJ, ASG24RBAJ
ASG30RBAJ



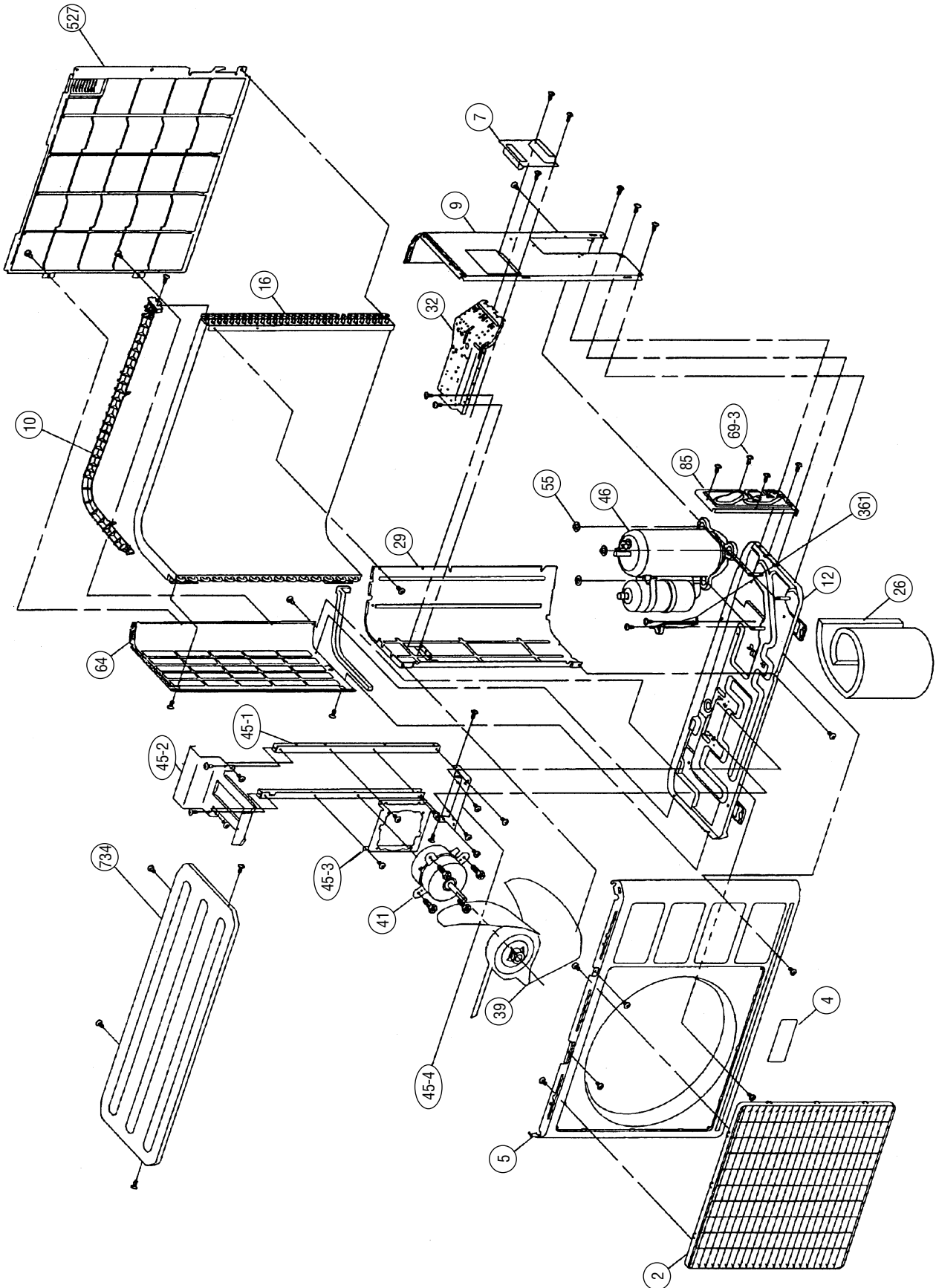
Models : ASG18ABAJ, ASG18RBAJ
ASG24ABAJ, ASG24RBAJ
ASG30RBAJ



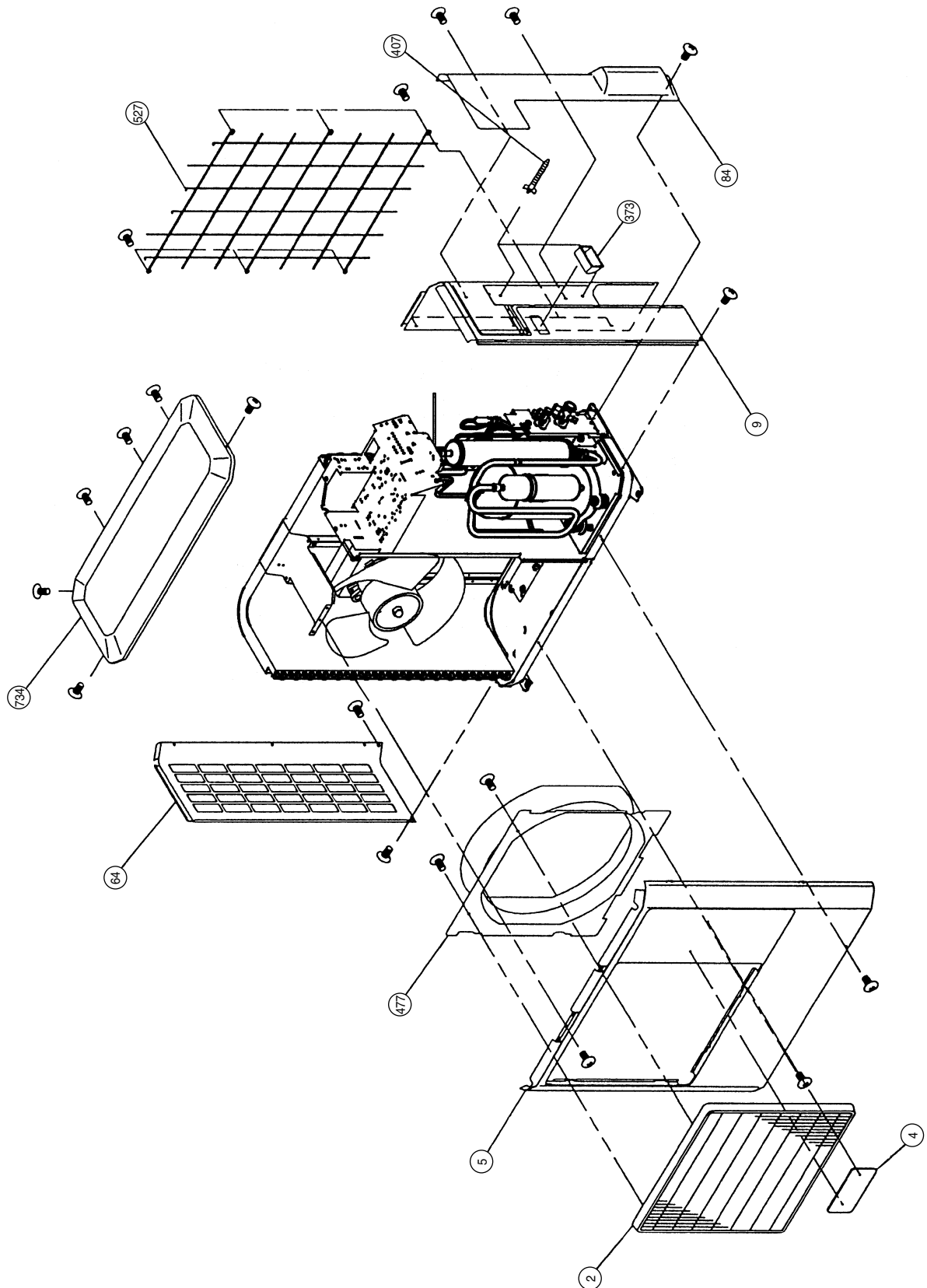
**Models : ASG18ABAJ, ASG18RBAJ
ASG24ABAJ, ASG24RBAJ
ASG30RBAJ**



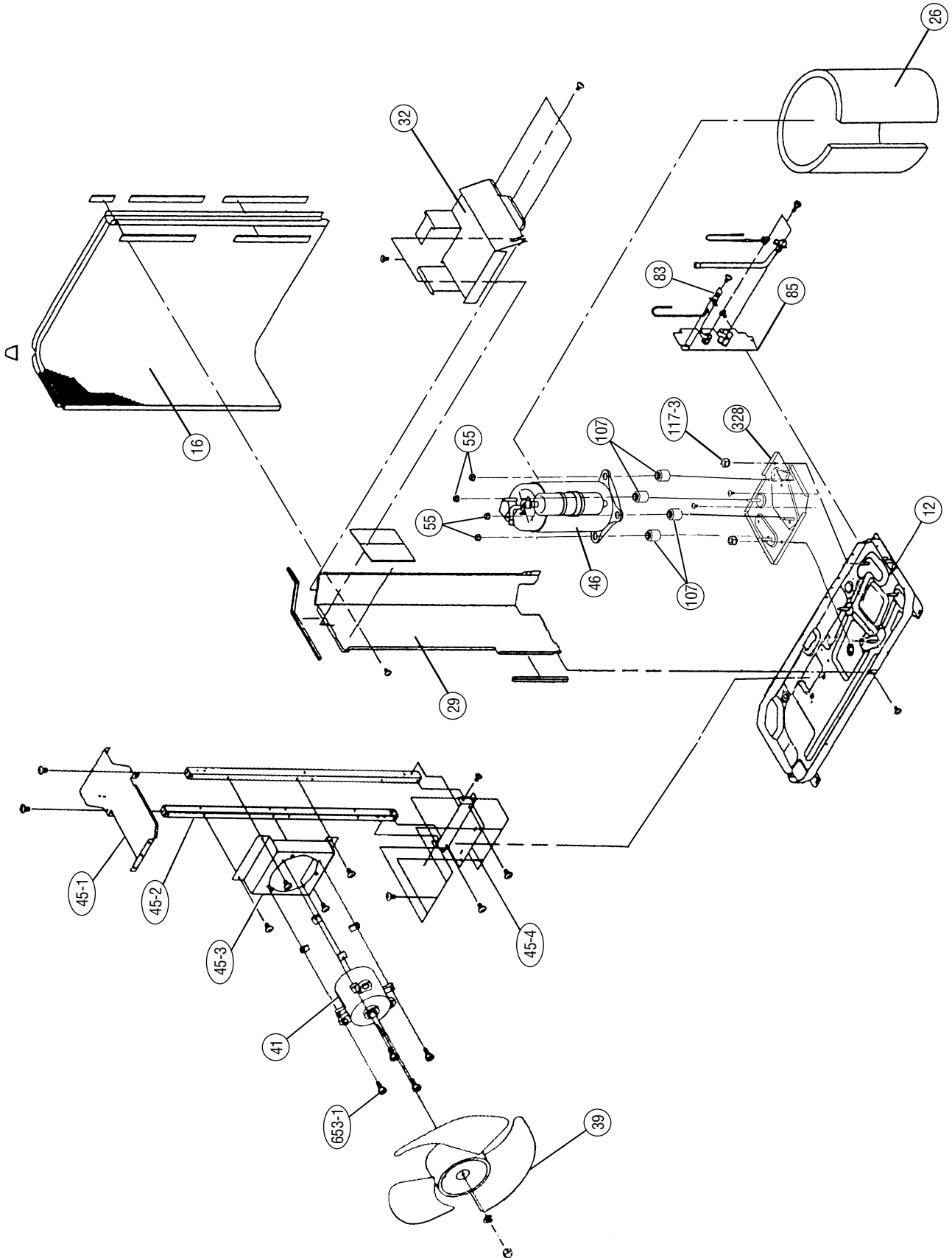
Models : AOG18ANAK, AOG18ANAKH
AOG18RNAKH, AOG24ANAK
AOG24ANAKH, AOG24RNAKH



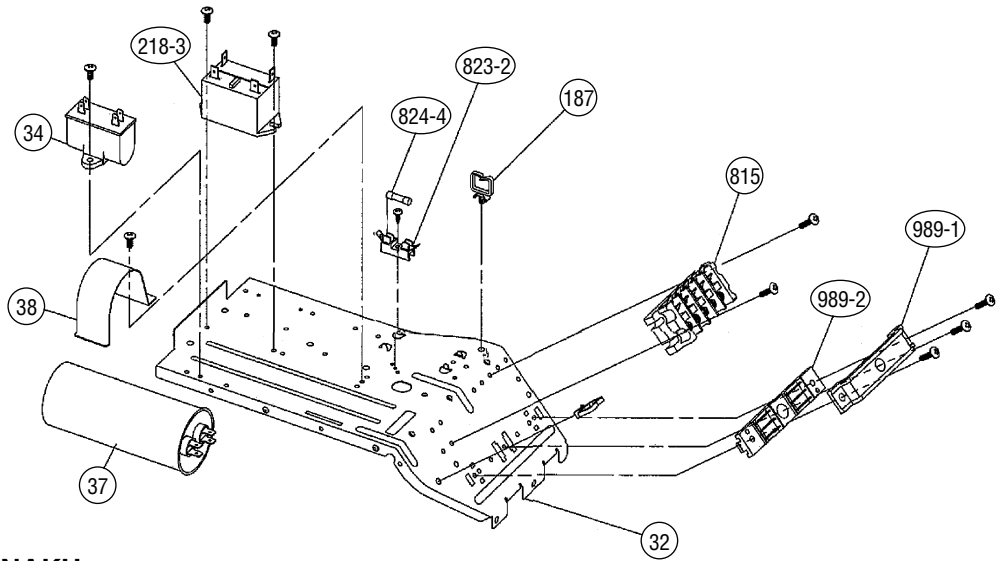
Model : AOG30RMADH



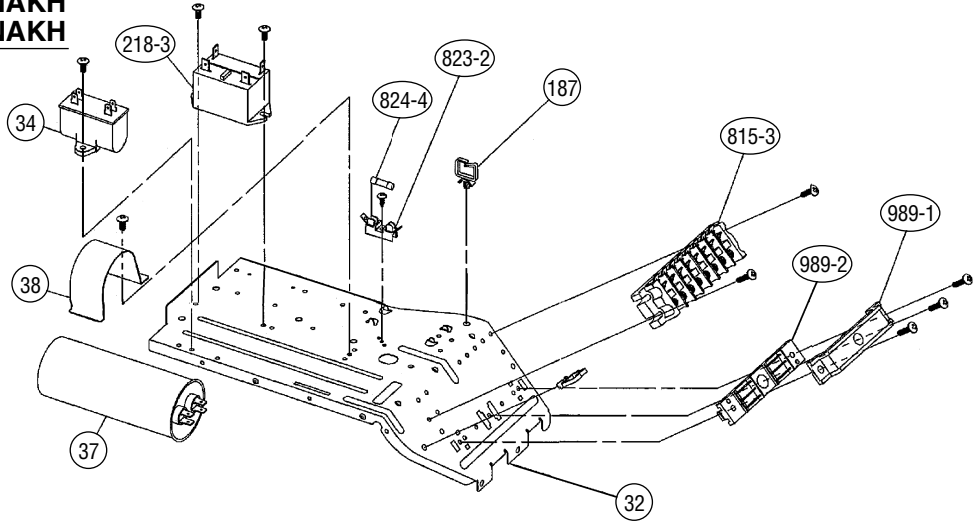
Model : AOG30RMADH



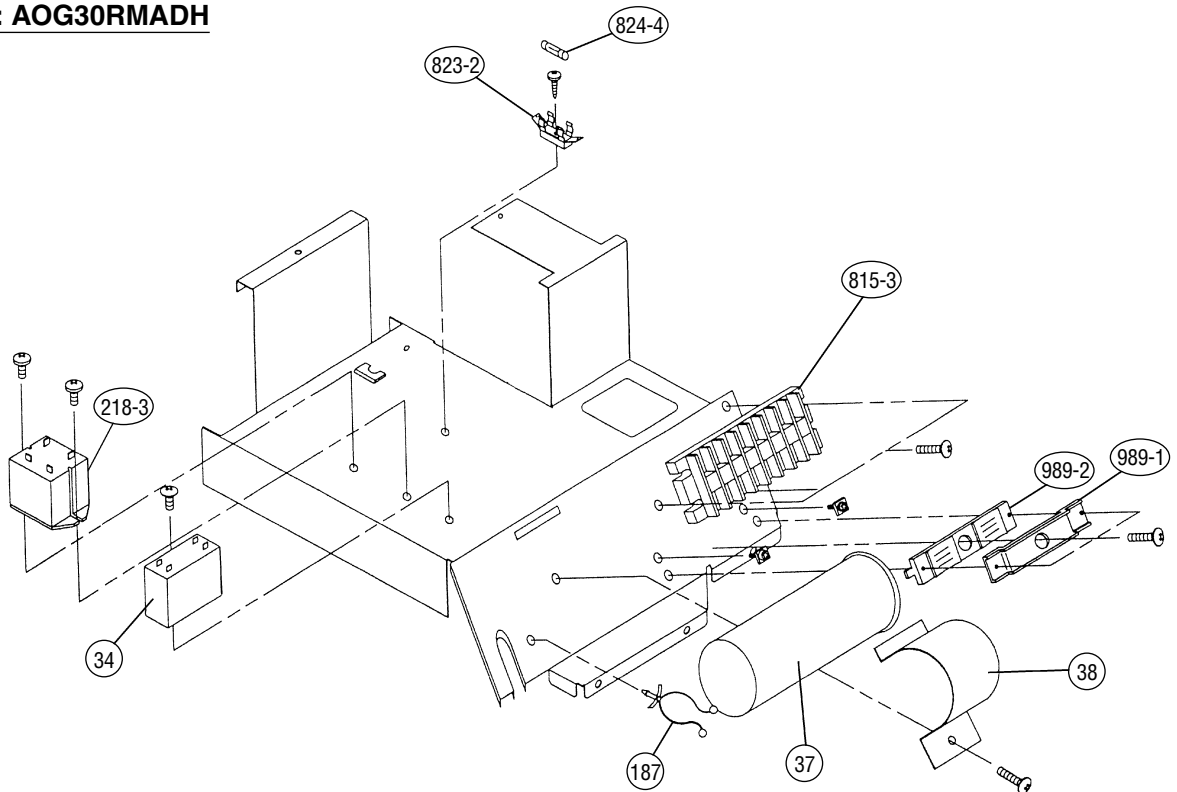
**Models : AOG18ANAK, AOG18ANAKH
AOG24ANAK, AOG24ANAKH**



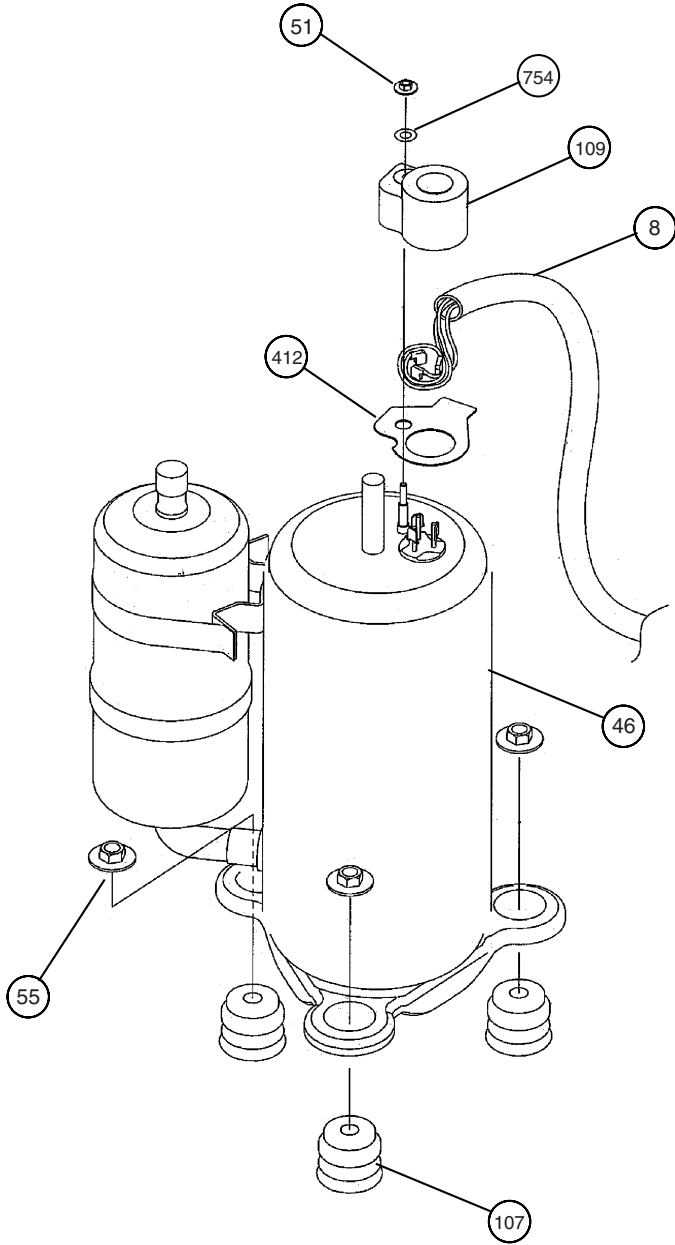
**Models : AOG18RNAKH
AOG24RNAKH**



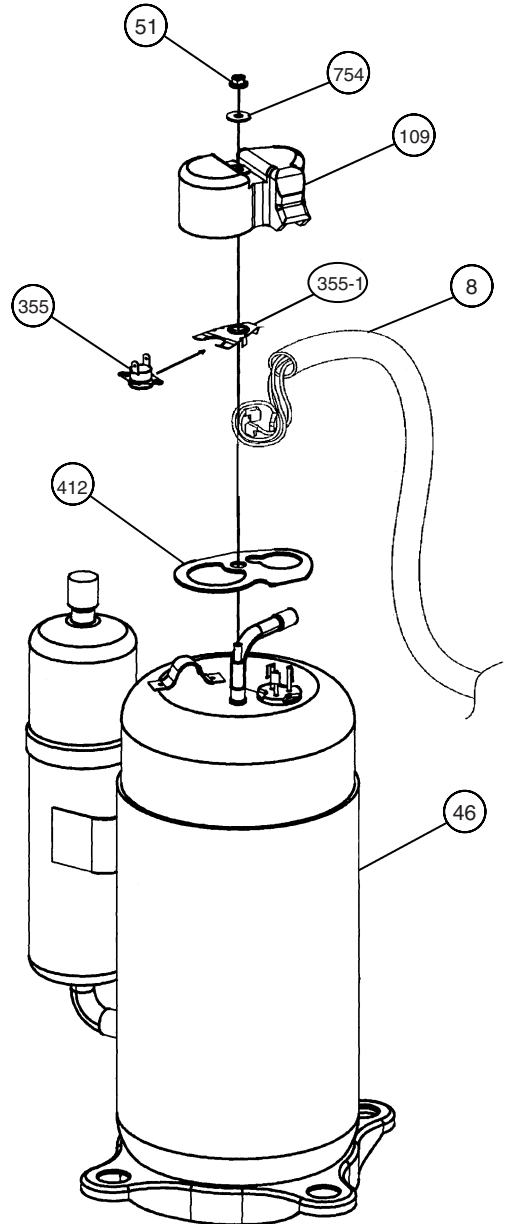
Model : AOG30RMADH



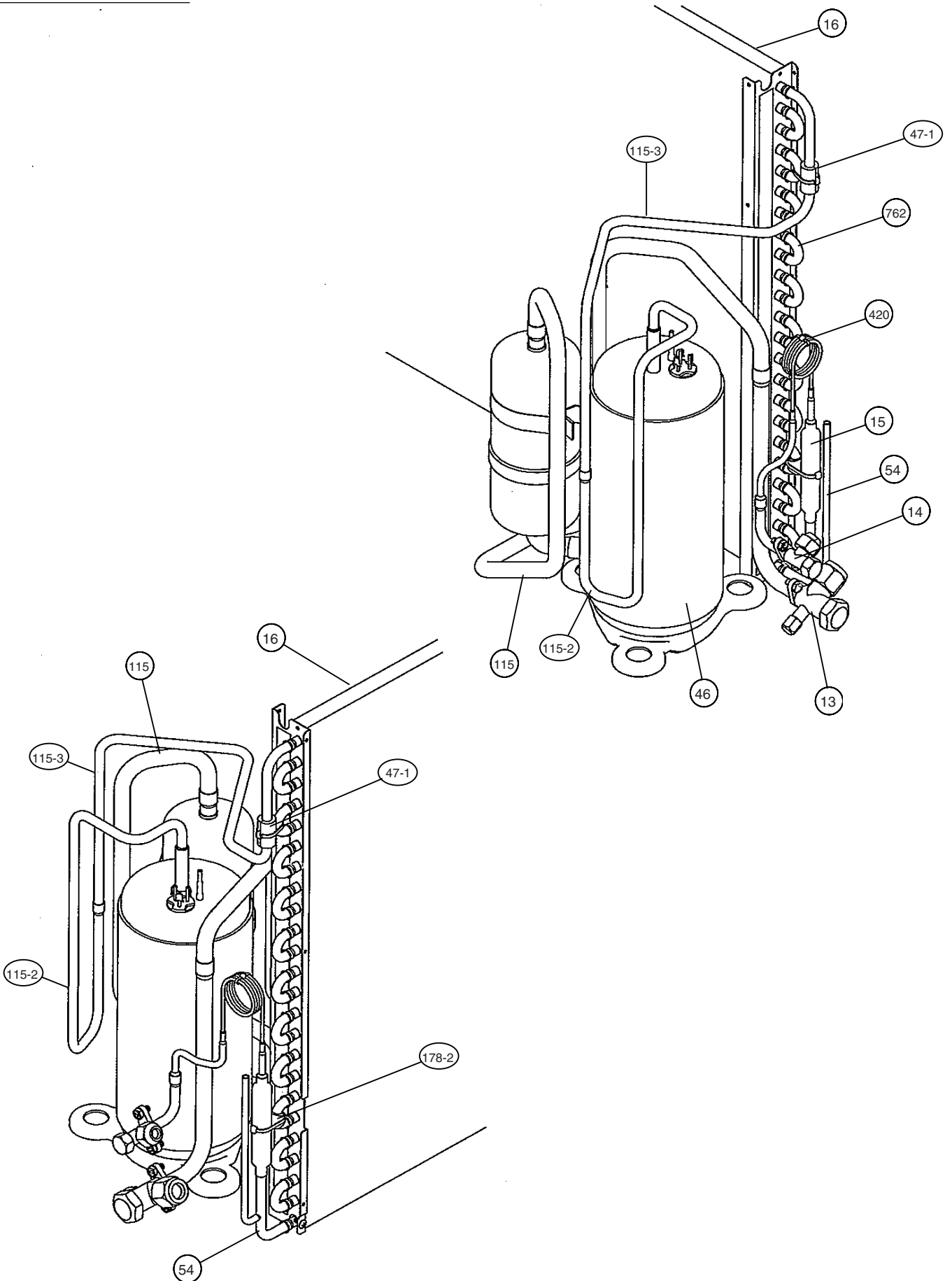
**Models : AOG18ANAK, AOG18ANAKH
AOG18RNAKH, AOG24ANAK
AOG24ANAKH, AOG24RNAKH**



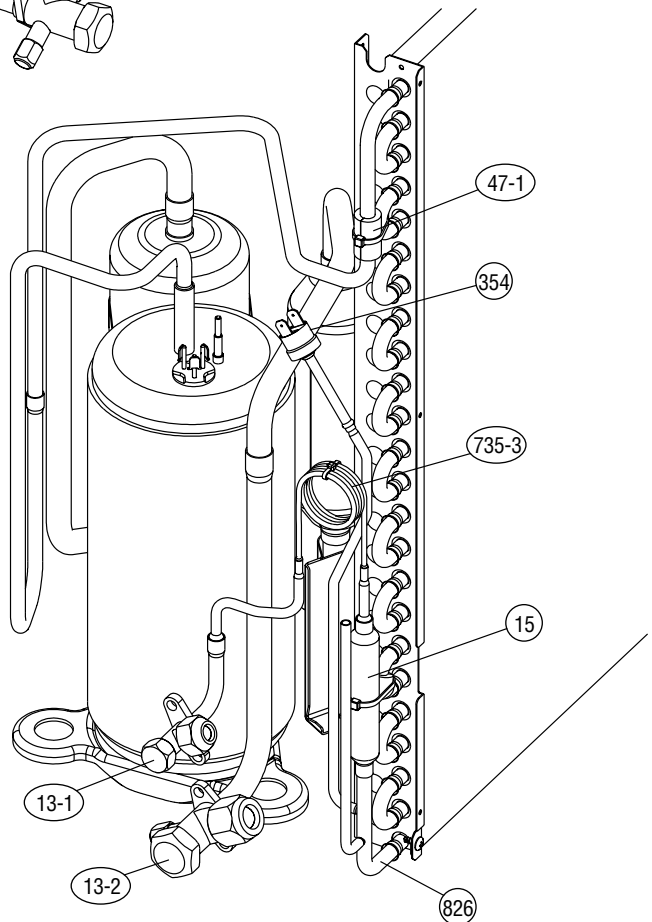
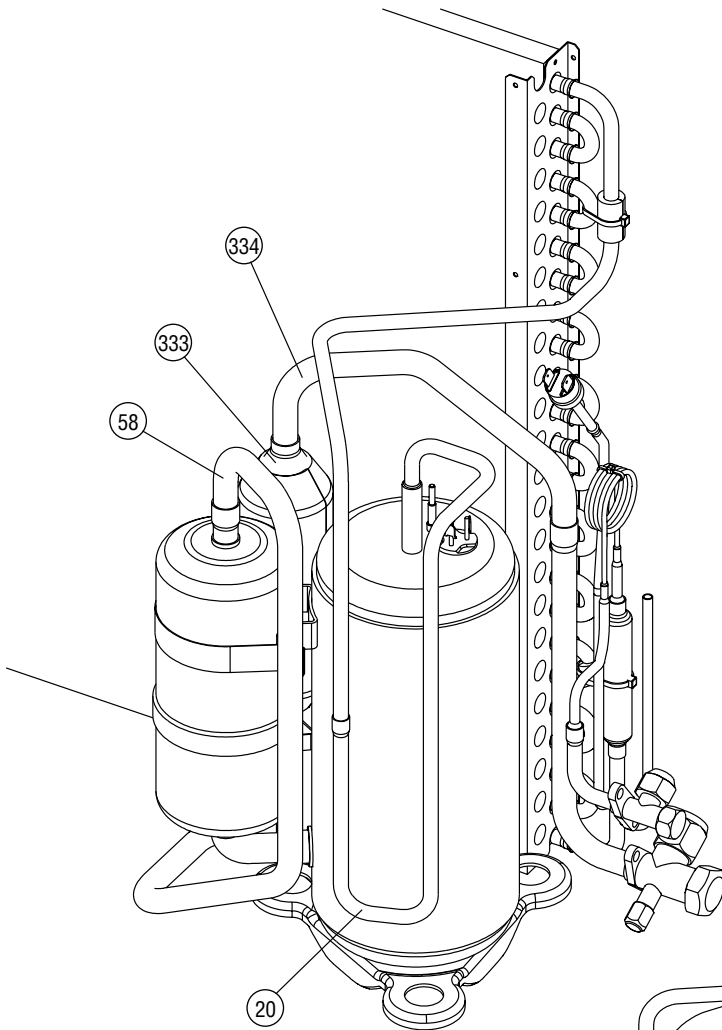
Model : AOG30RMADH



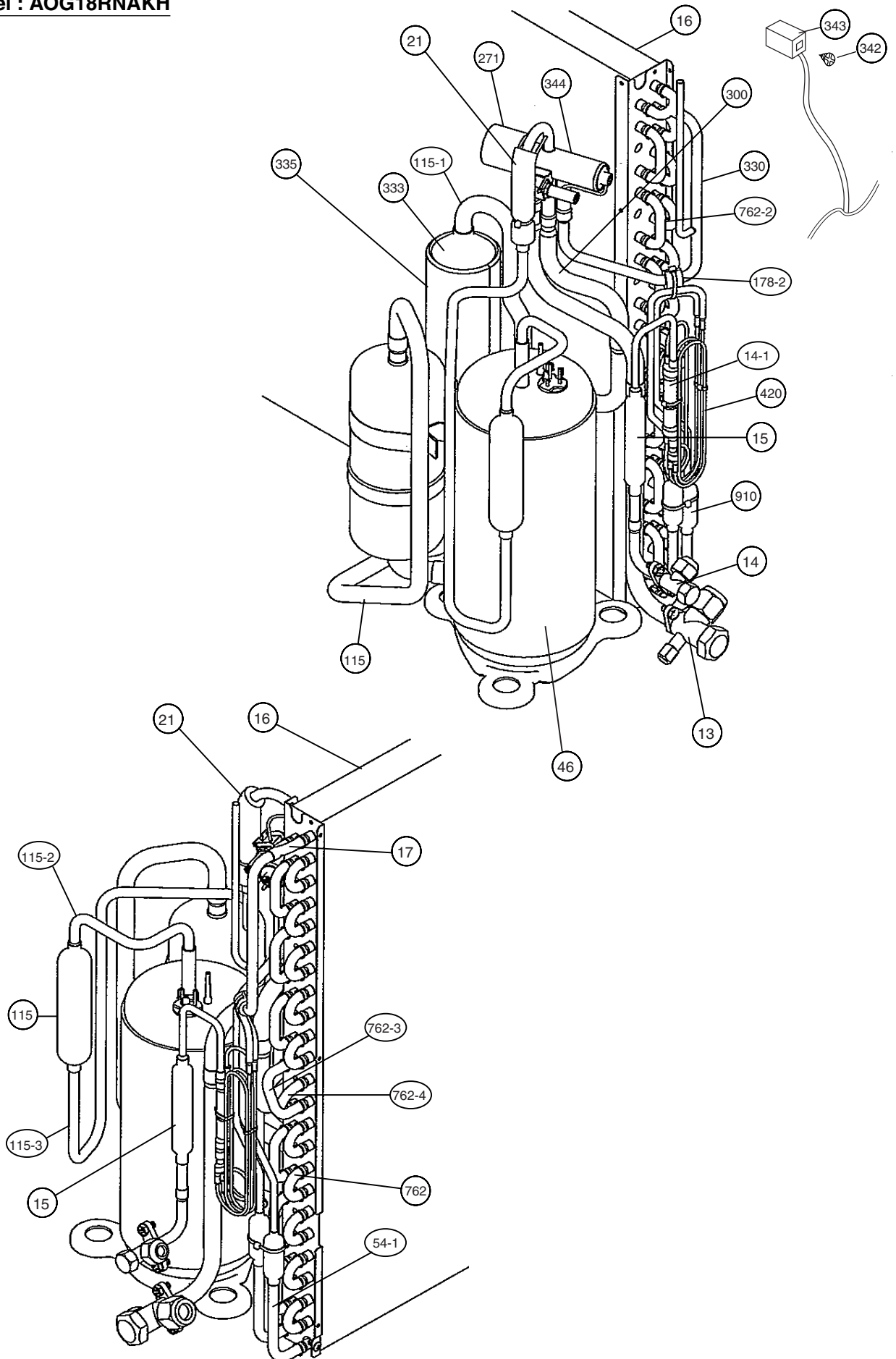
Model : AOG18ANAK



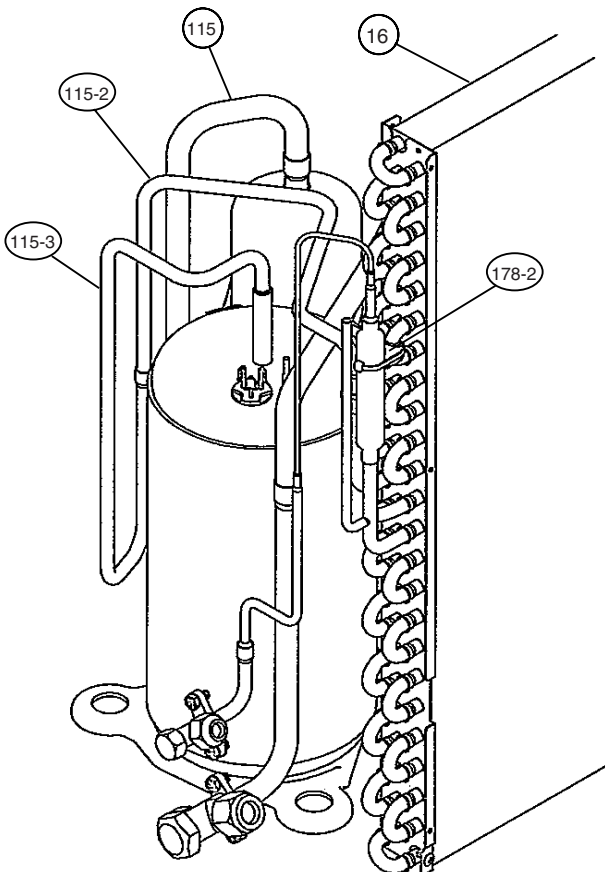
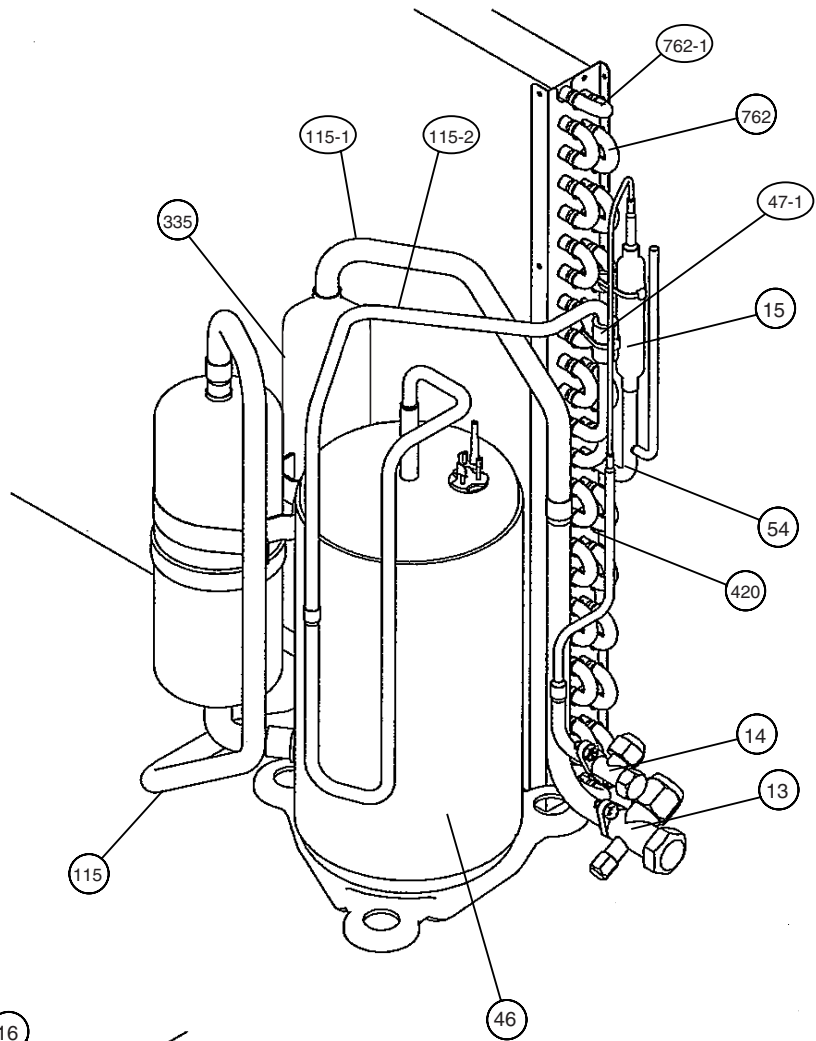
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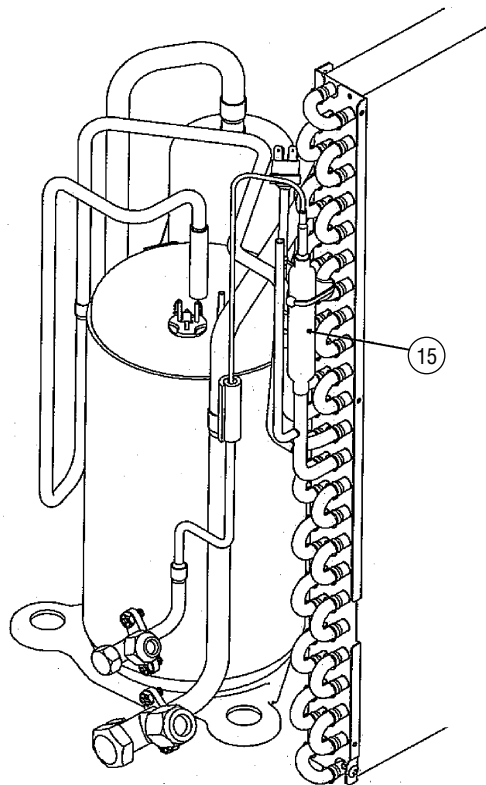
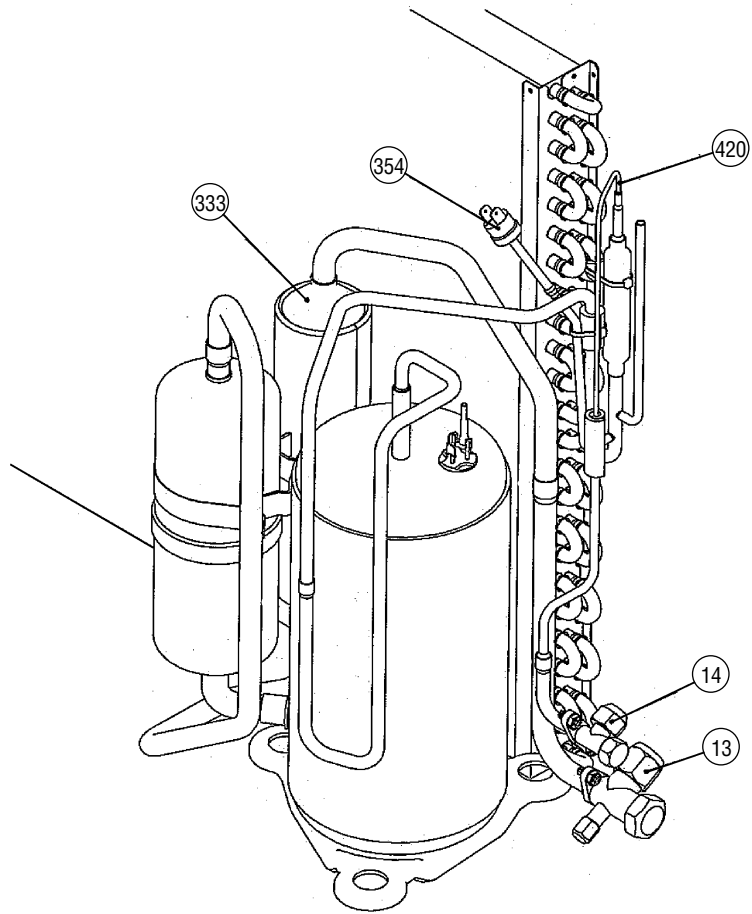
Model : AOG18RNAKH



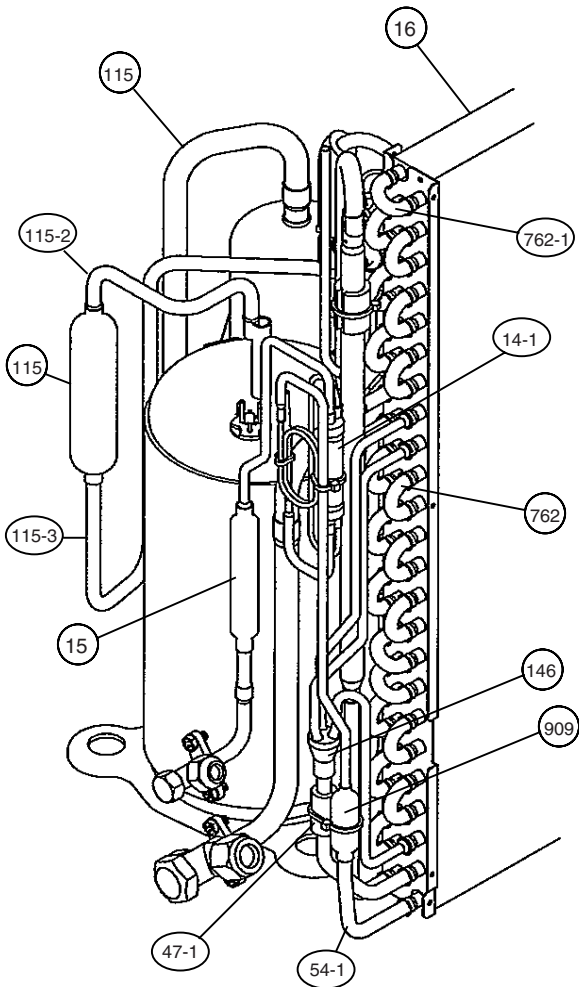
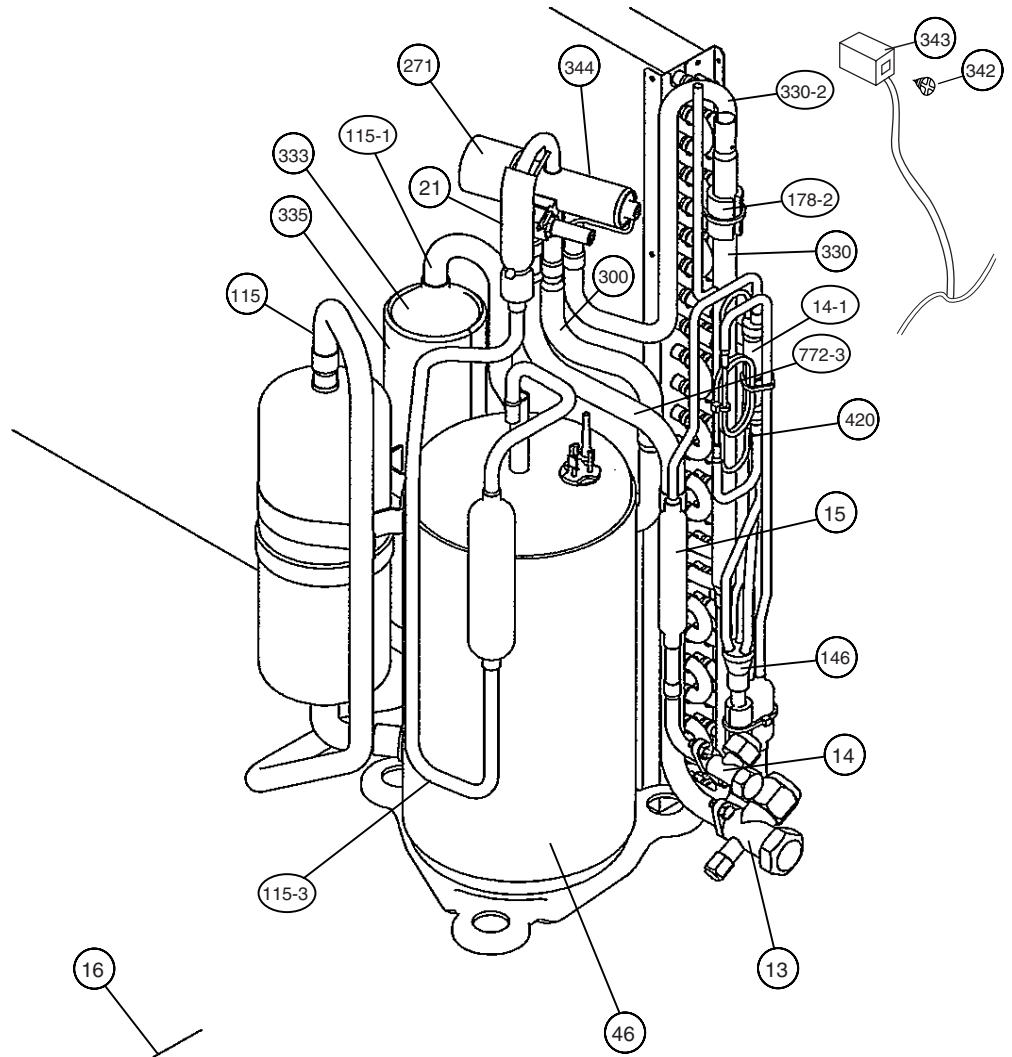
Model : AOG24ANAK



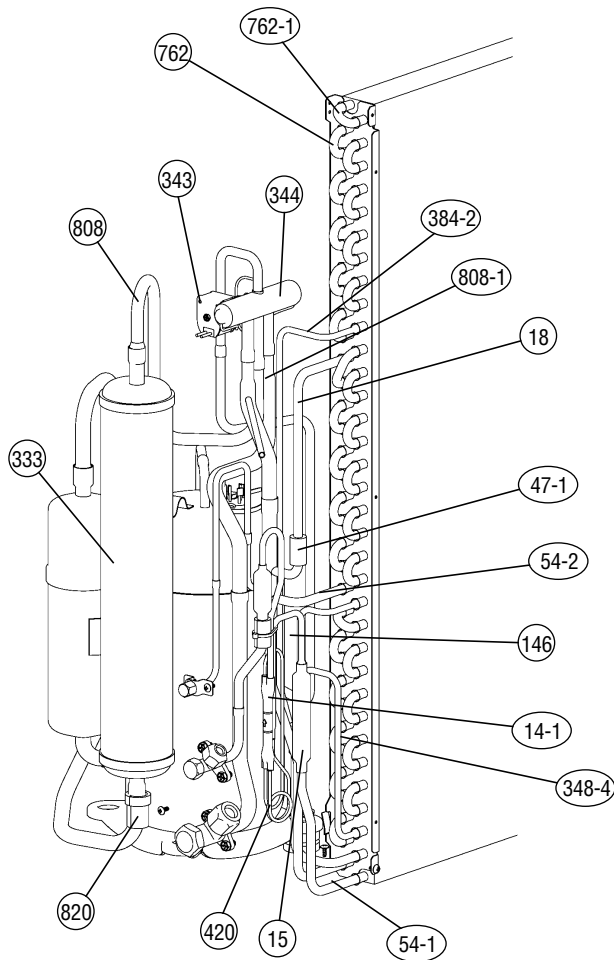
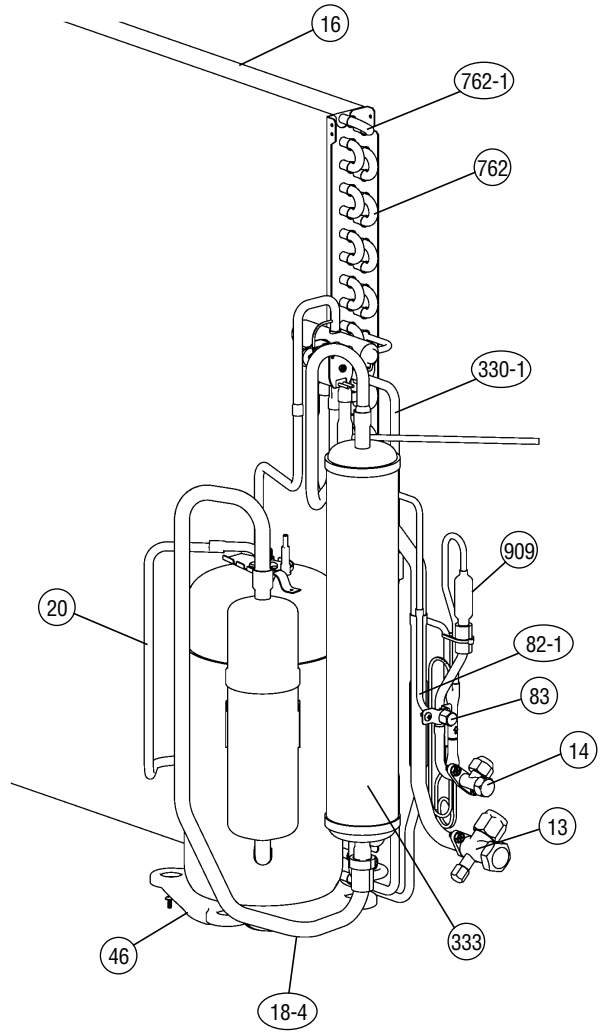
Model : AOG24ANAKH



Model : AOG24RNAKH



Model : AOG30RMADH



PARTS LIST

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

INDOOR UNIT

Ref. No.	Description	Part No.					Ord.
		ASG18ABAJ	ASG18RBAJ	ASG24ABAJ	ASG24RBAJ	ASG30RBAJ	Qty
34	Capacitor (Fan Motor)	9704305060	9704305060	9704305060	9704305060	9704305060	
40	Water Seal Plate	9369684005	9369684005	9369684005	9369684005	9369684005	
45	Bracket (Eva.)	9369372001	9369372001	9369372001	9369372001	9369372001	
61	Decoration Plate-G	9368756017	9368756017	9368756017	9368756017	9368756017	
63	Front Panel	9368540012	9368540012	9368540012	9368540012	9368540012	
69	Louver	9368560010	9368560010	9368560010	9368560010	9368560010	
69-1	Louver Base-A	9368558017	9368558017	9368558017	9368558017	9368558017	
69-2	Louver Base-B	9368559014	9368559014	9368559014	9368559014	9368559014	
74	Air Filter	9368552008	9368552008	9368552008	9368552008	9368552008	
92	Link Holder	9368563004	9368563004	9368563004	9368563004	9368563004	
108	Base Assy	9369209017	9369209017	9369209017	9369209017	9369209017	
122	Bearing Assy	9368574000	9368574000	9368574000	9368574000	9368574000	
127	Drain Hose	9367695003	9367695003	9367695003	9367695003	9367695003	
146	Evaporator Assy	9369220005	9369220005	9369220005	9369220005	9369220005	
146-1	Evaporator-A Assy	—	—	—	—	9369366000	
146-2	Evaporator-B Assy	—	—	—	—	9369373008	
158	Joint Pipe Assy	9369242007	9369242007	9369242007	9369242007	9371341019	
160	Front Drain Pan Assy	9369200014	9369200014	9369200014	9369200014	9369200014	
160-1	Rear Drain Pan Assy	9369201011	9369201011	9369201011	9369201011	9369201011	
163-2	Thermistor Spring-A	313728262708	313728262708	313728262708	313728262708	313728262708	
164	Fan Motor Assy-IN	9601388012	9601388012	9601388012	9601388012	9601388012	
169	Cross Flow Fan Assy	9368586003	9368586003	9368586003	9368586003	9368586003	
178-1	Rubber (Motor)	9368575007	9368575007	9368575007	9368575007	9368575007	
199	Step Motor	9900020019	9900020019	9900020019	9900020019	9900020019	
220	Water Plate	—	—	—	—	9368569006	
233	Power Transformer	9900069018	9900069018	9900069018	9900069018	9900069018	
236	Controller PCB Assy	9704607065	9704607287	9704607324	9704607300	9704607096	
240	Remote Control Unit	9371190020	9371190013	9371190020	9371190013	9371190013	
321	Flap	9368544010	9368544010	9368544010	9368544010	9368544010	
329	Coupling Pipe Assy	9369241000	9369241000	9369241000	9369241000	9371333014	
338	Motor Holder-A	9368550004	9368550004	9368550004	9368550004	9368550004	
338-1	Motor Holder-B	9368551001	9368551001	9368551001	9368551001	9368551001	
338-2	Motor Holder-C	9368769000	9368769000	9368769000	9368769000	9368769000	
385	Indicator PCB Assy	9702307011	9702307011	9702307011	9702307011	9702307011	
401	Wall Hook Bracket	9368579005	9368579005	9368579005	9368579005	9368579005	
408	Louver Link	9368562007	9368562007	9368562007	9368562007	9368562007	
425	Earth Plate	9368580001	9368580001	9368580001	9368580001	9368580001	
428	Screw Cover	9368576011	9368576011	9368576011	9368576011	9368576011	
435	Louver Spring	9368613006	9368613006	9368613006	9368613006	9368613006	
473	Pipe Holder	9368565008	9368565008	9368565008	9368565008	9368565008	
473-1	Cord Holder	9368566005	9368566005	9368566005	9368566005	9368566005	
506	Louver Rod	9368561017	9368561017	9368561017	9368561017	9368561017	
514	Control Box	9368543006	9368543006	9368543006	9368543006	9368543006	
522-1	Sector Gear	9368556006	9368556006	9368556006	9368556006	9368556006	
522-2	Pinion Gear	9368557003	9368557003	9368557003	9368557003	9368557003	
522-3	Flap Spring	9368612009	9368612009	9368612009	9368612009	9368612009	
557	Diffuser Spring	9368587000	9368587000	9368587000	9368587000	9368587000	
564	Bypass Pipe-A Assy	—	—	—	—	9371323015	
564-2	Bypass Pipe-C Assy	9369479007	9369479007	9369479007	9369479007	9371619019	
574-1	Evaporator Support-R	9368549008	9368549008	9368549008	9368549008	9368549008	

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

INDOOR UNIT (Continued)

Ref. No.	Description	Part No.					Ord.
		ASG18ABAJ	ASG18RBAJ	ASG24ABAJ	ASG24RBAJ	ASG30RBAJ	Q'ty
574-2	Evaporator Support-L	9368548001	9368548001	9368548001	9368548001	9368548001	
588	Evaporator Holder	—	—	—	—	9368775001	
684	Motor Base	9368555009	9368555009	9368555009	9368555009	9368555009	
707	Display Cover	9368564001	9368564001	9368564001	9368564001	9368564001	
735	Distributor Assy	9371178004	9371178004	9371178004	9371178004	9371325019	
743	Remote Control Unit Holder Case	9305642014	9305642014	9305642014	9305642014	9305642014	
759	Intake Grille-G	9368542016	9368542016	9368542016	9368542016	9368542016	
764	Drain Cap	9367677009	9367677009	9367677009	9367677009	9367677009	
815	Terminal	9306489106	9900016029	9306489106	9900016029	9900016029	
846	Relay	9900007010	9900007010	9900007010	9900007010	9900007010	
855	Cover Display	9369264016	9369264016	9369264016	9369264016	9369264016	
855-1	Cover Display-B	9369594014	9369594014	9369594014	9369594014	9369594014	
855-2	Cover Display-C	9369683015	9369683015	9369683015	9369683015	9369683015	
938	Control Box Cover-R	9368570002	9368570002	9368570002	9368570002	9368570002	
942	Control Box Cover	9368611002	9368611002	9368611002	9368611002	9368611002	
960	Diffuser Assy	9369346019	9369346019	9369346019	9369346019	9369346019	
963	Fan Guard	9368588007	9368588007	9368588007	9368588007	9368588007	
963-1	Fan Guard Holder	9368554002	9368554002	9368554002	9368554002	9368554002	
998	Bypass Pipe-A	9369238000	9369238000	9369238000	9369238000	9371324012	
999	Bypass Pipe-B	9369239007	9369239007	9369239007	9369239007	9371346014	
—	Thermistor Assy-Room	9703299179	9703299179	9703299179	9703299179	9703299179	
—	Thermistor Assy-Pipe	9703297076	9703297076	9703297076	9703297076	9703297076	

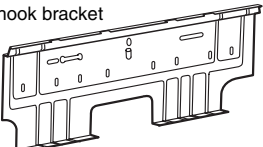
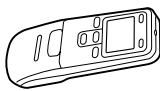

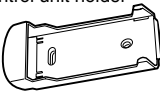
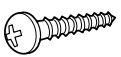

OUTDOOR UNIT (Continued)

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

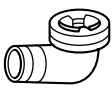

Ref. No.	Description	Part No.							Ord. Q'ty
		AOG18ANAKH	AOG18ANAK	AOG18RNAKH	AOG24ANAKH	AOG24ANAK	AOG24RNAKH	AOG30RMADH	
187-1	Clamp No. 1219	—	—	—	—	—	—	313361271706	
218-3	Main Relay	9900074012	9900074012	9900074012	9900074012	9900074012	9900074012	—	
271	4-Way Valve Rubber	—	—	313728251908	—	—	313728251908	—	
300	Suction Pipe-C	—	—	9372177013	—	—	9372177013	—	
328	Comp. Plate Assy	—	—	—	—	—	—	9362272001	
330	Inlet Pipe (Cond.) Assy	—	—	—	—	—	9372185094	—	
330-1	Inlet Pipe (Cond.) Assy	—	—	—	—	—	—	9369068003	
330-2	Inlet Pipe (Condenser)-B	—	—	—	—	—	9372174012	—	
333	Accumulator	—	—	9368391003	9368391003	—	9368391003	9370703009	
335	Insulation Accumulator	—	—	9368390006	9368390006	—	9368390006	—	
343	Solenoid	—	—	9900165017	—	—	9900165017	9900003029	
344	4-Way Valve	—	—	9970036019	—	—	9900163013	9307556012	
348-2	Outlet Pipe-A	—	—	—	—	—	—	9369078002	
348-4	Outlet Pipe-C	—	—	—	—	—	—	9369080005	
348-5	Outlet Pipe-D	—	—	—	—	—	—	—	
354	Pressure Switch	9370941005	—	—	9370941005	—	—	—	
355	Thermal Switch	—	—	—	—	—	—	9371516011	
355-1	Holder	—	—	—	—	—	—	9371554013	
361	Accumulator Support Assy	—	—	9372252017	9372252017	—	9372252017	—	
373	Grip	—	—	—	—	—	—	9352157004	
407	Clamp (Cable) No. 1259	—	—	—	—	—	—	313739340109	
412	Cover Gasket (Comp.)	9371512013	9371512013	9371512013	9371512013	9371512013	9371512013	9362370004	
420	Capillary Assy	9372197073	9372197073	9372197264	9372197295	9372197295	9372197271	9370683004	
477	Bell-Mouth	—	—	—	—	—	—	9359809012	
527	Protective Net	9371934013	9371934013	9371934013	9371934013	9371934013	9371934013	9359844013	
734	Top Panel Sub Assy	9372304013	9372304013	9372304013	9372304013	9372304013	9372304013	—	
734	Cabinet Top Plate	—	—	—	—	—	—	9359799023	
744	Clamp (Condenser)	—	—	—	—	—	—	313166374106	
754	Terminal Gasket Washer	9351053017	9351053017	9351053017	9351053017	9351053017	9351053017	—	
754	Washer	—	—	—	—	—	—	0700078026	
762	U-Pipe-A Assy	9302910017	9302910017	9302910017	9302910017	9302910017	9302910017	9302910017	
762-1	U-Pipe-B Assy	—	—	—	9302911014	9302911014	9302911014	9302911014	
762-2	U-Pipe-D Assy	—	—	313061017508	—	—	—	—	
762-3	U-Pipe-E Assy	—	—	313728127806	—	—	—	—	
762-4	U-Pipe-E Assy	—	—	313806127802	—	—	—	—	
772	Joint Pipe-A	—	—	—	—	—	—	9369084003	
772-3	Joint Pipe (Valve)	—	—	—	—	—	9372178010	—	
808	Inlet Pipe (Accumulator)	—	—	—	—	—	—	9369081002	
808-1	Inlet Pipe Valve	—	—	—	—	—	—	9369082009	
815	Terminal-5P	9900230023	9900230023	—	9900203023	9900203023	—	—	
815-3	Terminal-8P	—	—	9900203047	—	—	9900203047	9900203047	
820	Accumulator Holder Rubber	—	—	9354022010	9354022010	—	9354022010	9354022010	
823-2	Fuse Holder	0500063024	0500063024	0500063024	0500063024	0500063024	0500063024	0500063024	
824-4	Fuse	0600222529	0600222529	0600222529	0600222529	0600222529	0600222529	0600222529	
909	Strainer	—	—	—	—	—	9369287008	9369287008	
910	Strainer-B	—	—	9365099018	—	—	—	—	
989-1	Cord Clamp-A	9359822011	9359822011	9359822011	9359822011	9359822011	9359822011	9359822011	
989-2	Cord Clamp-B	9359823018	9359823018	9359823018	9359823018	9359823018	9359823018	9359823018	

STANDARD ACCESSORIES



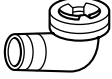

INDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Wall hook bracket 	9368579005
Remote control unit 	18A, 24A, 30A model 9371190020 (AR-JW2)
	18R, 24R, 30R model 9371190013 (AR-JW1)
Battery (penlight) 	0600185534
Remote control unit holder 	9305642014
Tapping screw (big) (φ 4 x 20) 	301141164200
Tapping screw (small) (φ 3 x 12) 	301141533125

OUTDOOR UNIT ACCESSORIES (18,000 • 24,000BTU model)

Name and Shape	Part No.
Drain pipe 	9303029015 [Heat & cool model (Reverse cycle) only]
Drain cap 	313166024302 [Heat & cool model (Reverse cycle) only]

OUTDOOR UNIT ACCESSORIES (30,000 BTU model)

Name and Shape	Part No.
Cable clip 	313739340109
Tapping screw 	301463040100
Drain pipe 	9303029015 [Heat & cool model (Reverse cycle) only]
Drain cap 	313166024302 [Heat & cool model (Reverse cycle) only]

