FUJITSU

INVERTER MULTI AIR CONDITIONER

FLOOR CONSOLE / UNDER CEILING DUAL type

SERVICE MANUAL

Refrigerant R410A

Models

Indoor unit	Outdoor unit
ABY14LBAJ	AOY24LMAM2
ABY18LBAJ	

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SPECIFICATIONS

TYPE	COOL & HEAT	
INDOOR UNIT	ABY14LBAJ	ABY18LBAJ
OUTDOOR UNIT	AOY24LMAM2	

ELECTRICAL DATA (INDOOR UNIT)

COOLING CAPACITY (kW)	4.2	5.0
HEATING CAPACITY (kW)	4.9	6.1
MOISTURE REMOVAL (ℓ /hr)	1.5	1.7
AIR CIRCULATION-Hi (m^3/hr)	640	780

ELECTRICAL DATA (OUTDOOR UNIT)

POWER SOURCE (V)	230	
FREQUENCY (Hz)	50	
COOLING CAPACITY (MAX) (kW)	5.8 (7.8)	
HEATING CAPACITY (MAX) (kW)	6.4 (9.0)	
RUNNING CURRENT (MAX) (A)	COOLING	7.6 (12.2)
	HEATING	7.2 (12.2)
INPUT WATTS (MAX) (kW)	COOLING	1.73 (2.77)
	HEATING	1.64 (2.77)
E.E.R. (kW / kW)	COOLING	3.35
	HEATING	3.90

COMPRESSOR

TYPE	Hermetic type, Inverter, 4 poles, Three phase, DC motor, Rotary
DISCRIMINATION	TNB 220 FPCM
REFRIGERANT R410A (g)	1,900

FAN MOTOR

POWER SOURCE (V)			230	
INDOOR UNIT	DISCRIMINATION		MFA-14JTT	MFA-18JTT
	HI	(r.p.m.)	850	1,030
	MED	(r.p.m.)	760	890
	LO	(r.p.m.)	670	770
OUTDOOR UNIT		(r.p.m.)	780	

DIMENSIONS

INDOOR UNIT	H x W x D	(mm)	199 x 990 x 655
OUTDOOR UNIT	H x W x D	(mm)	650 x 830 x 320

WEIGHT

INDOOR UNIT	GROSS / NET	(kg)	36 / 27	37 / 28
OUTDOOR UNIT	GROSS / NET	(kg)	62 / 56	

NOISE LEVEL

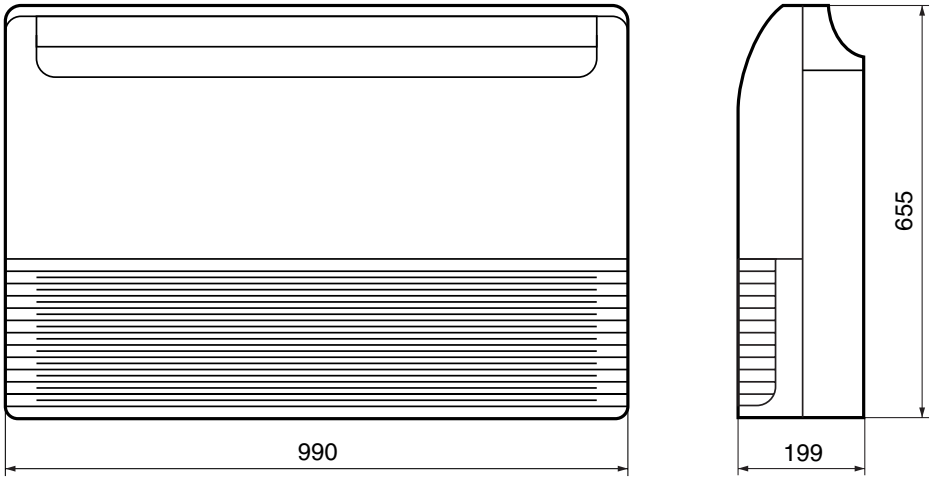
INDOOR UNIT	HI	(dB)	36	43
	MED	(dB)	33	40
	LO	(dB)	29	35
OUTDOOR UNIT	COOLING	(dB)	49	
	HEATING	(dB)	50	

OUTLINE AND DIMENSIONS

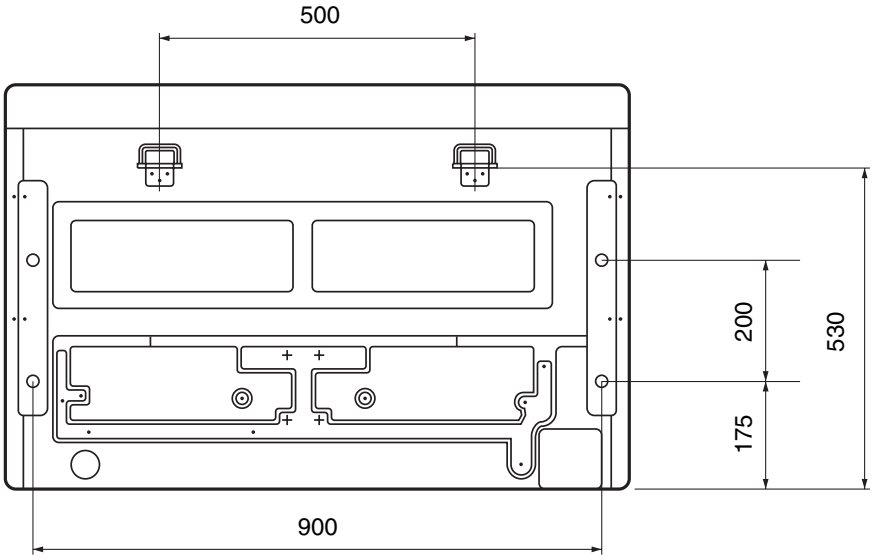
Unit : mm

INDOOR UNIT

Models : ABY14LBAJ, ABY18LBAJ



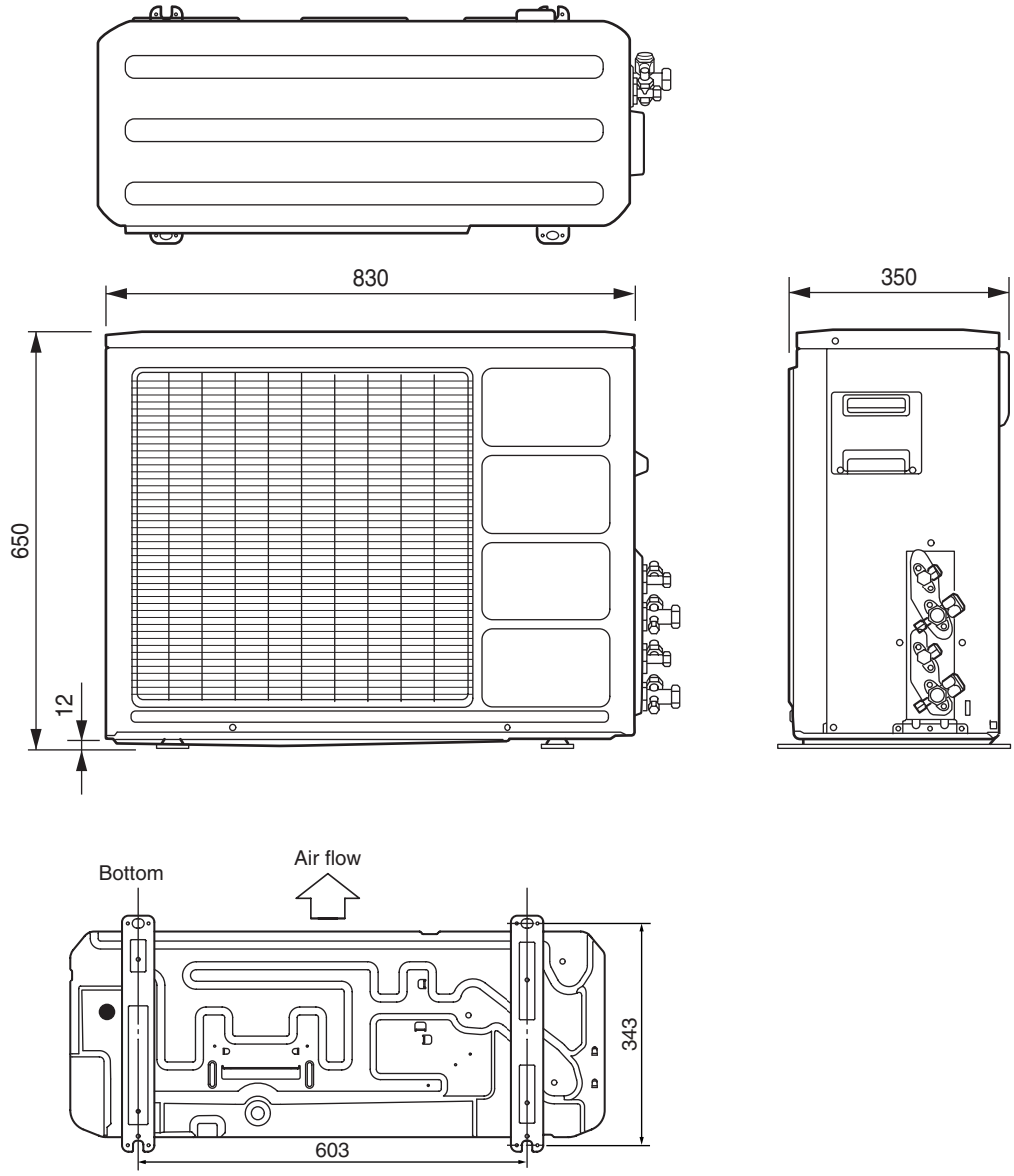
(rear view)



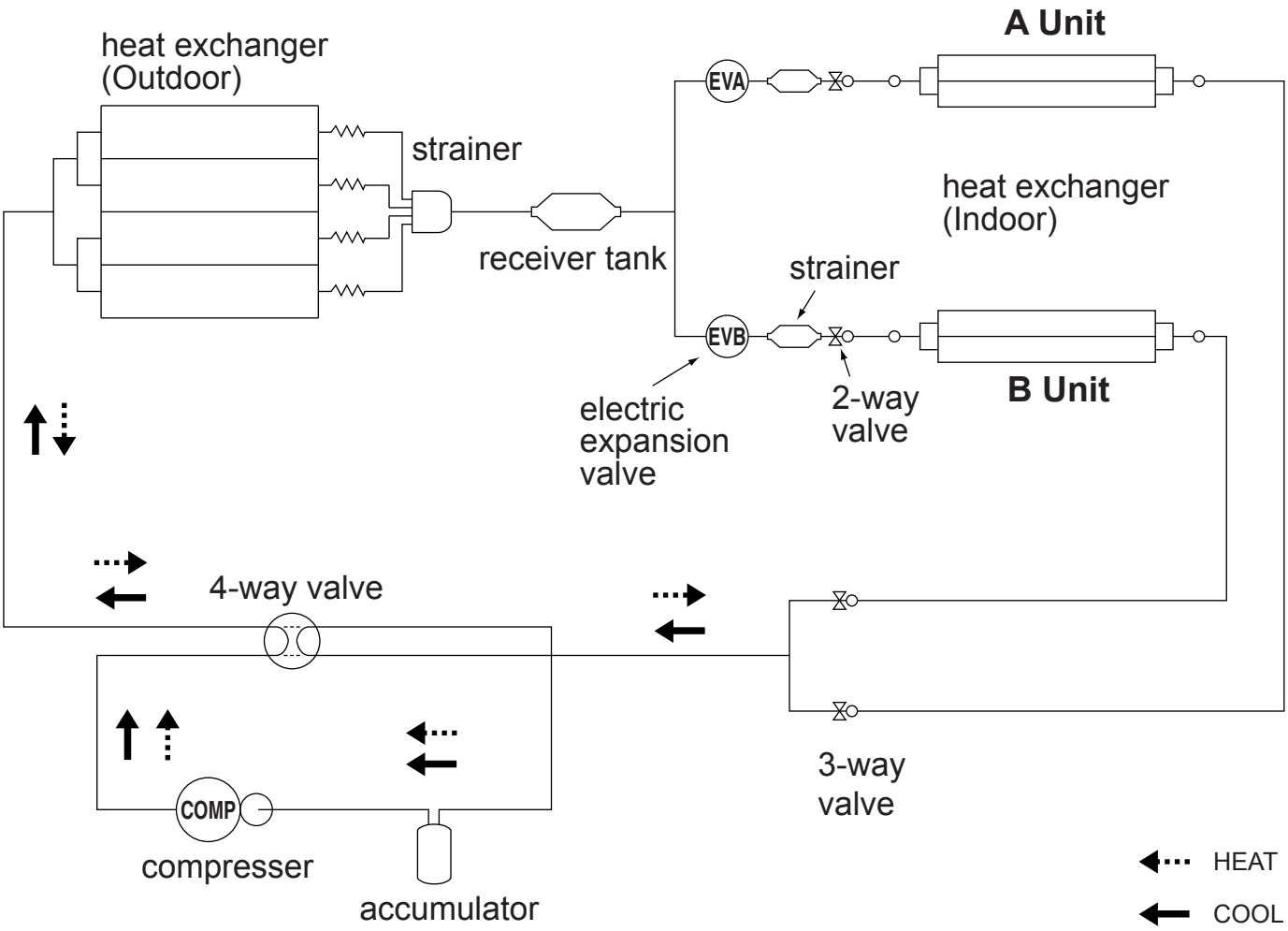
OUTDOOR UNIT

Unit : mm

Model : AOY24LMAM2

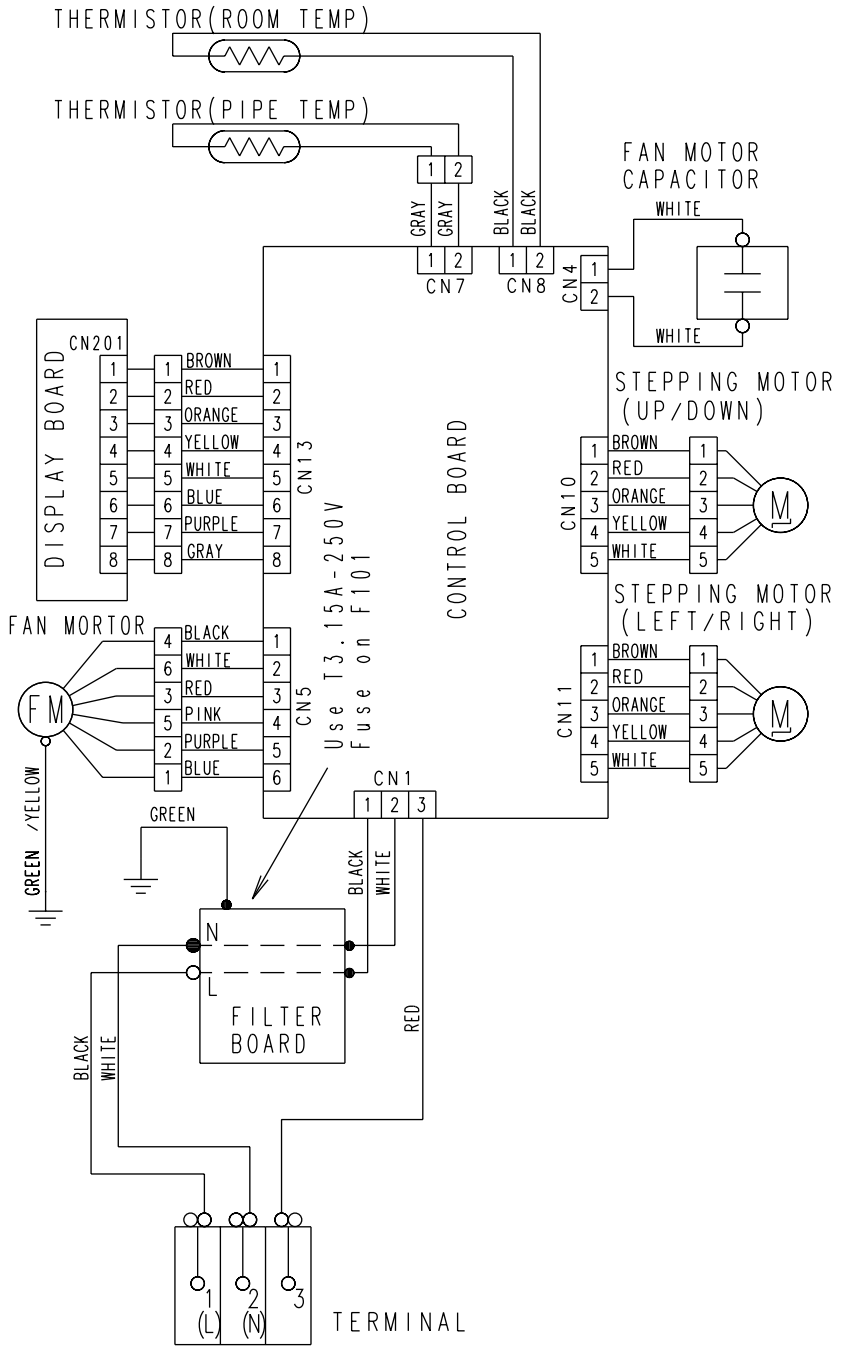


REFRIGERANT SYSTEM DIAGRAM



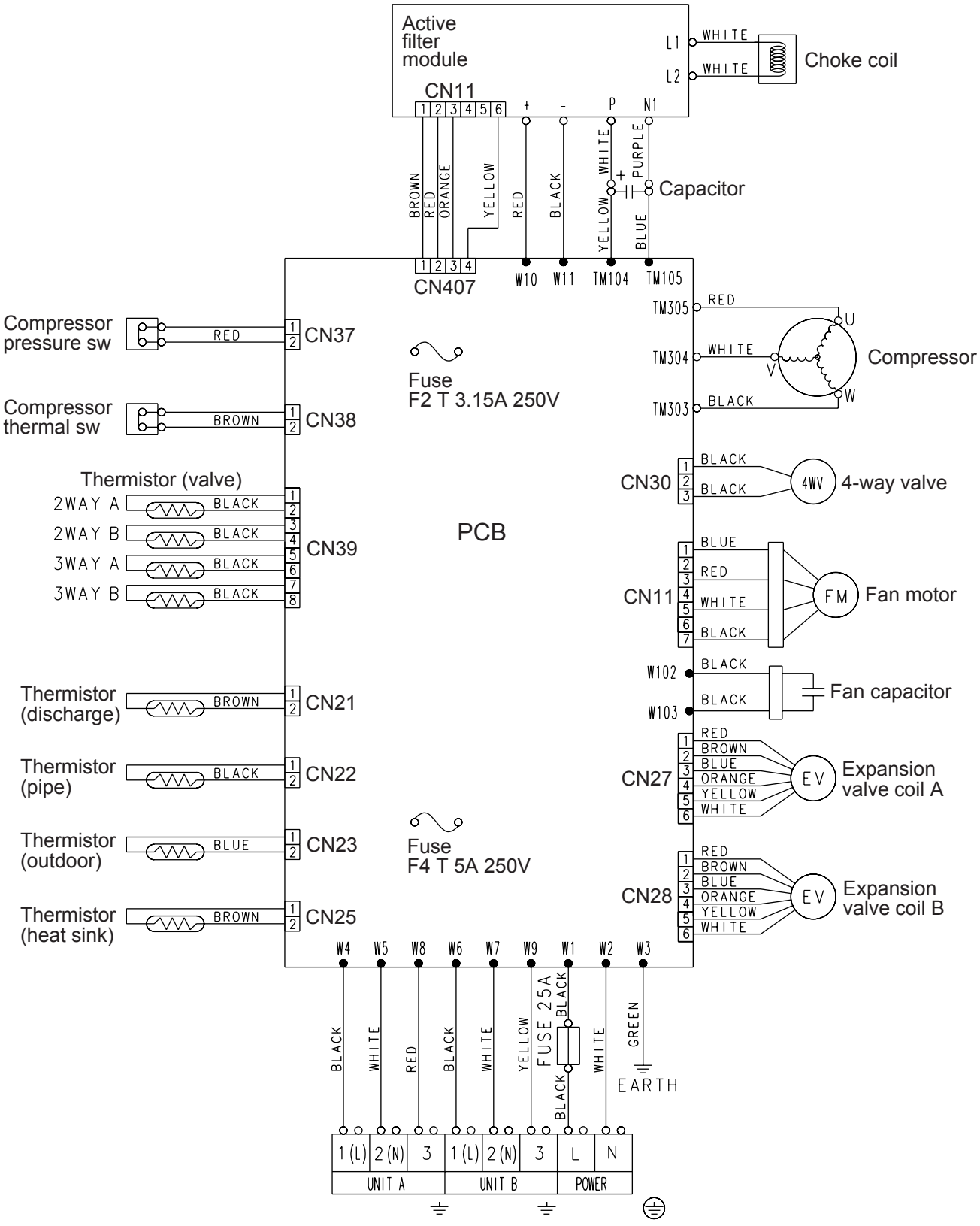
CIRCUIT DIAGRAM

Models :
ABY14LBAJ
ABY18LBAJ



OUTDOOR UNIT

Model : AOY24LMAM2

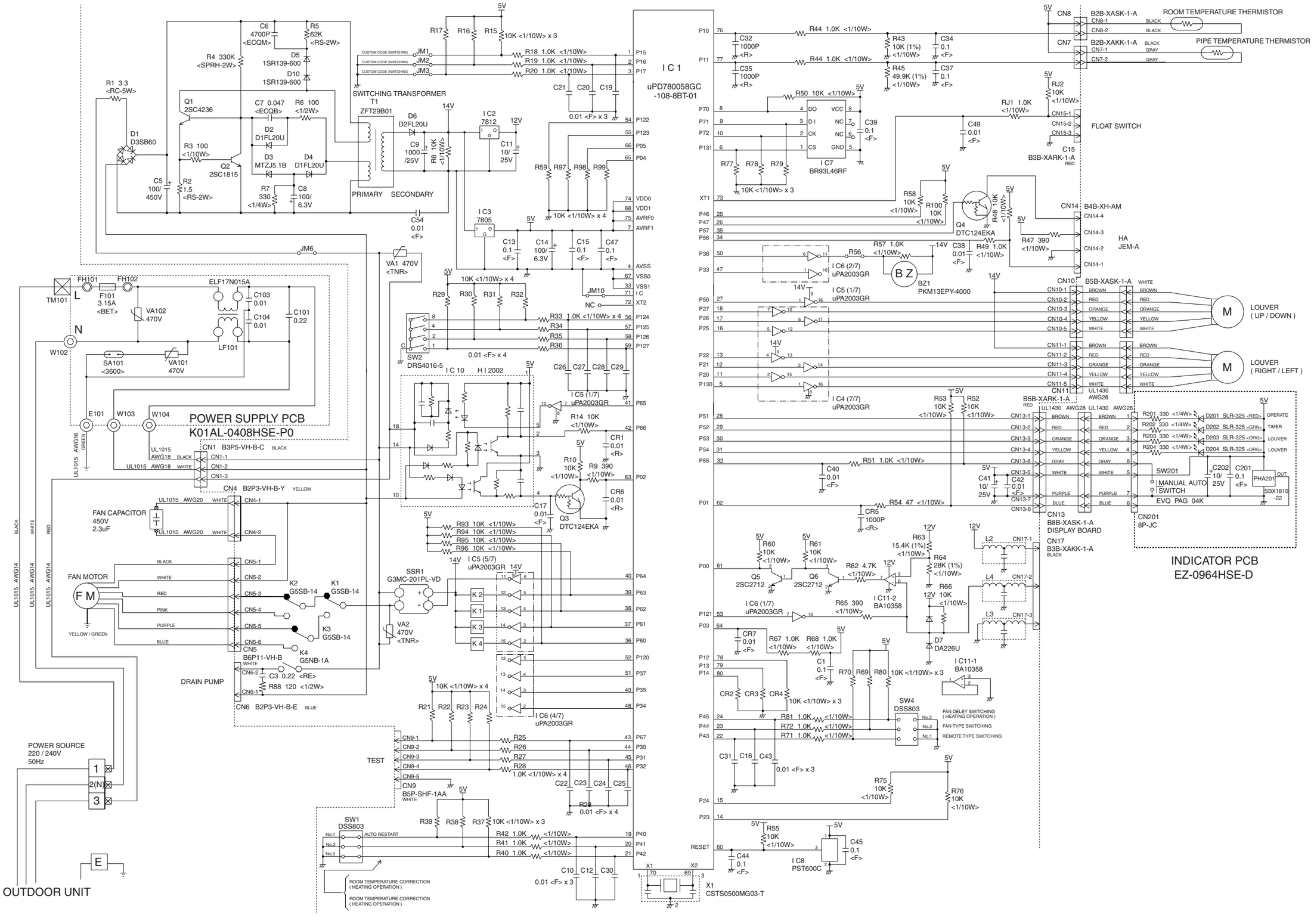


INDOOR PCB CIRCUIT DIAGRAM

Models : ABY14LBAJ
ABY18LBAJ

CONTROLLER PCB ASSY

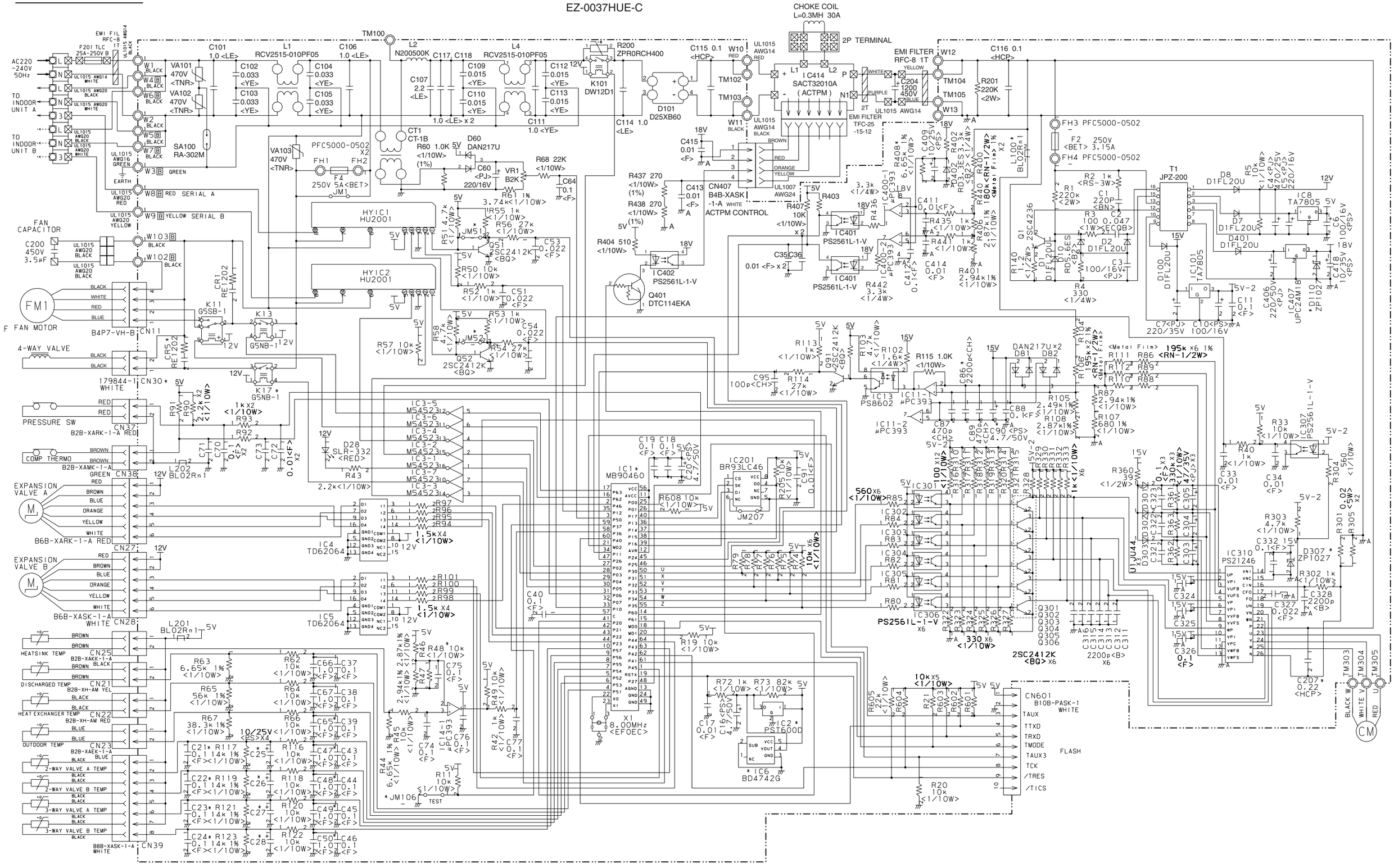
ABY14LBAJ : K01AL-0414HSE-F1
ABY18LBAJ : K01AL-040DHSE-F1



OUTDOOR PCB CIRCUIT DIAGRAM

Model : AOY24LMAM2

CONTROLLER PCB ASSEMBLY (MAIN PCB)
EZ-0037HUE-C



ERROR CONTENTS

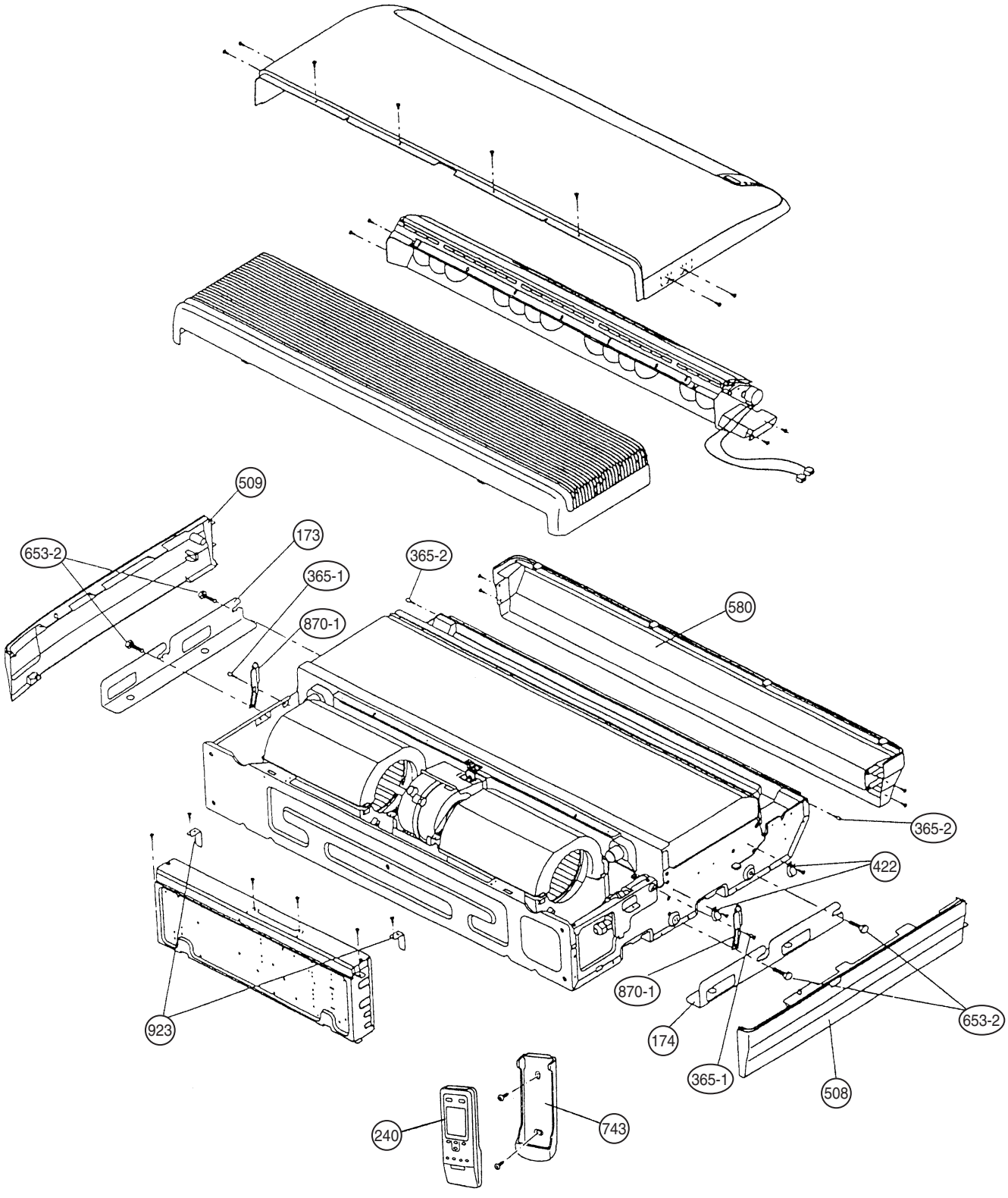
The OPERATION, TIMER and SWING lamps operate as follows according to the error contents.

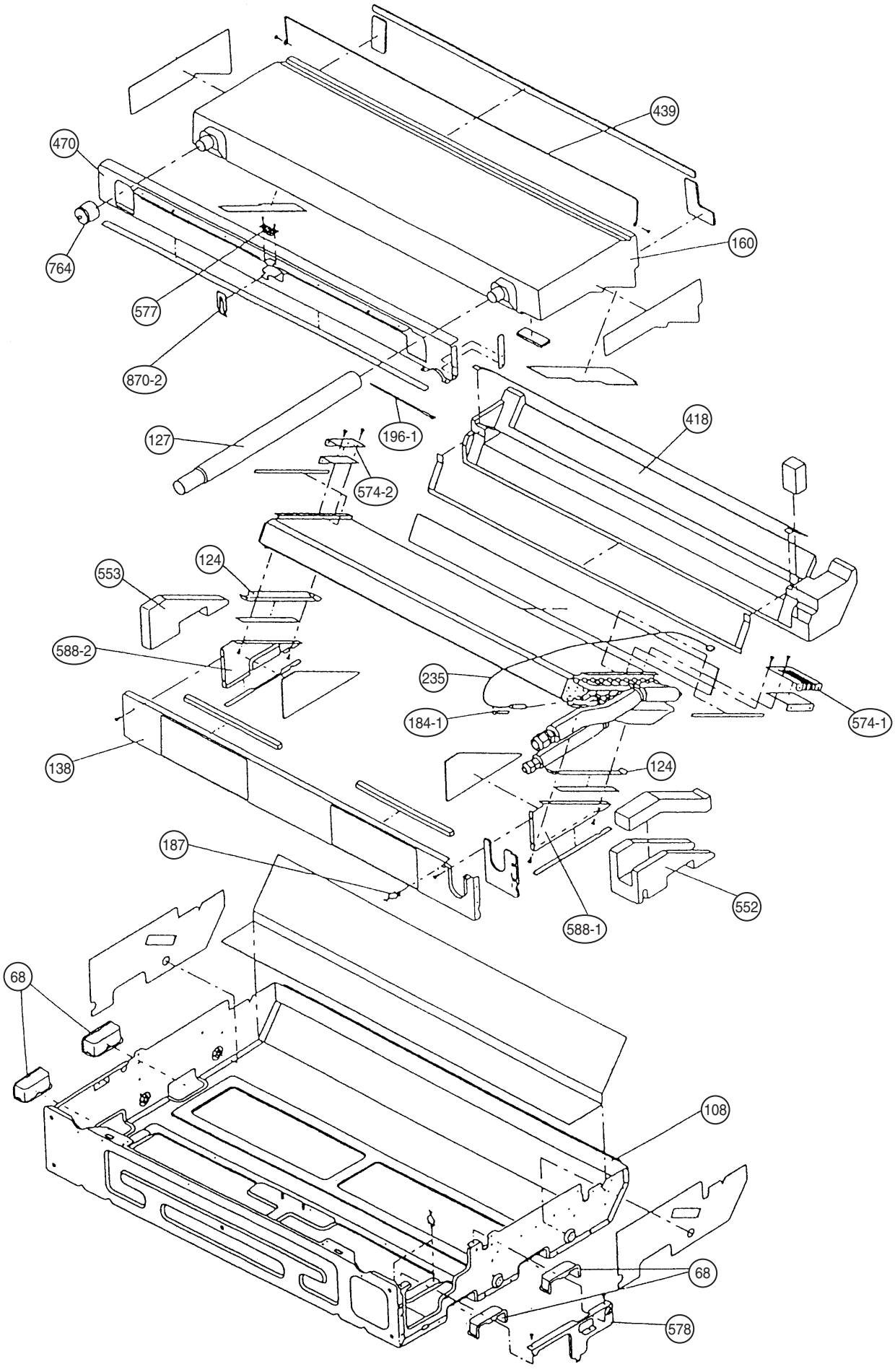
○ : Fast flashing
● : Slow flashing
– : Off

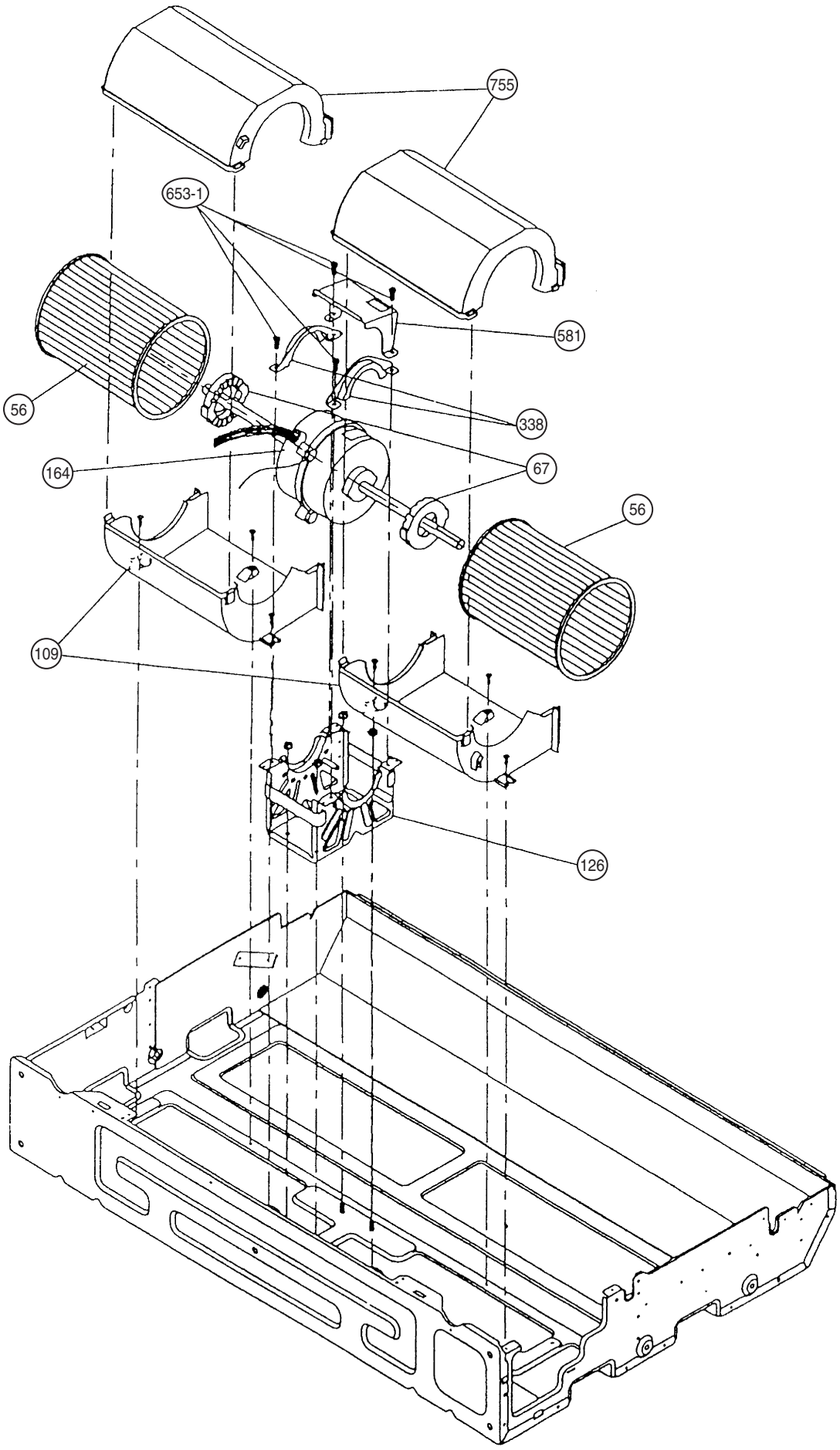
Error contents	Error display		
	OPERATION (RED)	TIMER (GREEN)	SWING (ORANGE)
Indoor unit EEPROM error	○	○	–
Indoor unit room temperature thermistor opened	2 times ●	○	–
Indoor unit room temperature thermistor short-circuited	2 times ●	○	○
Indoor unit heat exchanger thermistor opened	3 times ●	○	–
Indoor unit heat exchanger thermistor short-circuited	3 times ●	○	○
Outdoor unit ⟶ Indoor unit communication error	5 times ●	○	–
Indoor unit ⟶ Outdoor unit communication error	5 times ●	○	○
Indoor unit fan error	6 times ●	○	–
Outdoor unit heat exchanger thermistor error	○	3 times ●	–
Outdoor unit outdoor temperature thermistor error	○	4 times ●	–
Outdoor unit discharge thermistor error	○	5 times ●	–
Outdoor unit compressor thermistor error	○	8 times ●	–
Outdoor unit pressure switch error	○	9 times ●	–
Outdoor unit 2 way valve thermistor error	○	–	2 times ●
Outdoor unit 3 way valve thermistor error	○	–	3 times ●
Indoor unit distinction error	○	–	4 times ●
Current trip	○	10 times ●	–
Compressor loter location error	○	13 times ●	–
Outdoor fan motor error	○	14 times ●	–

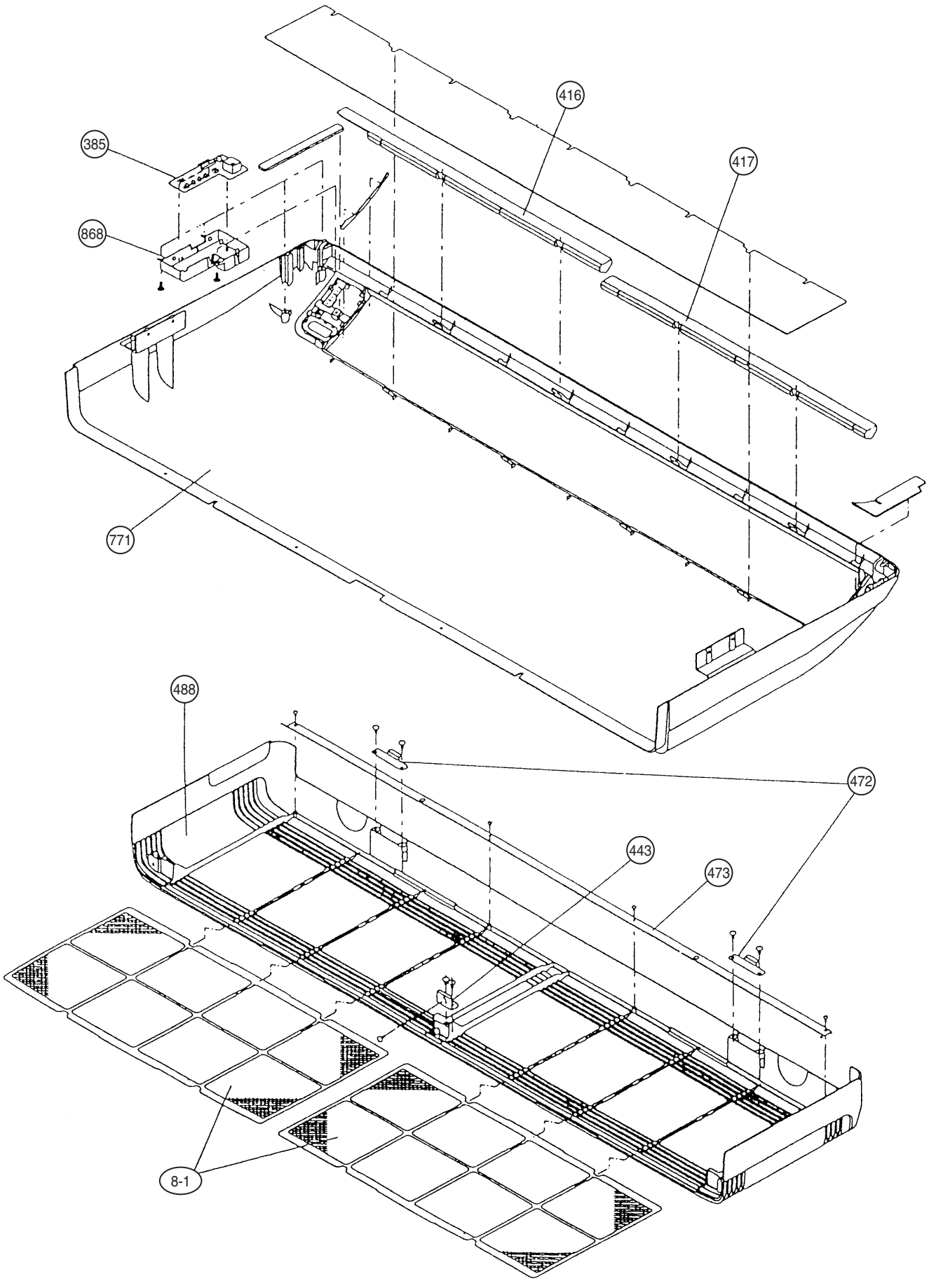
DISASSEMBLY ILLUSTRATION

Models :
ABY14LBAJ
ABY18LBAJ

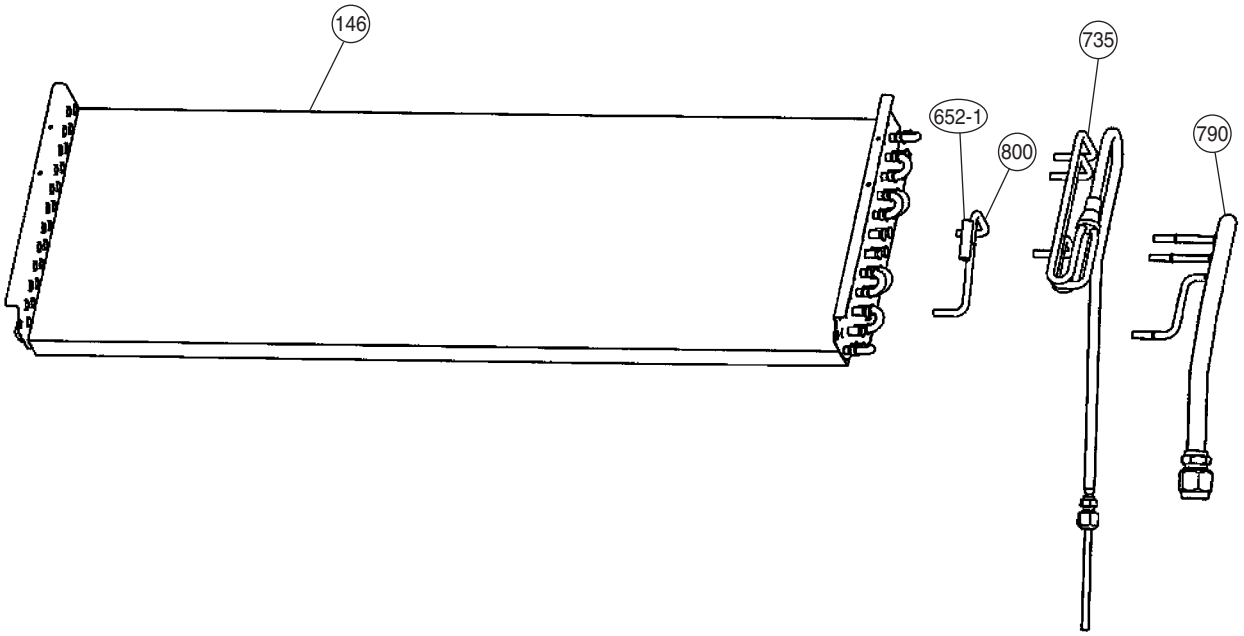



439
470
764
160
577
870-2
127
196-1
418
574-2
124
553
588-2
235
184-1
574-1
138
124
187
552
588-1
68
108
68
578

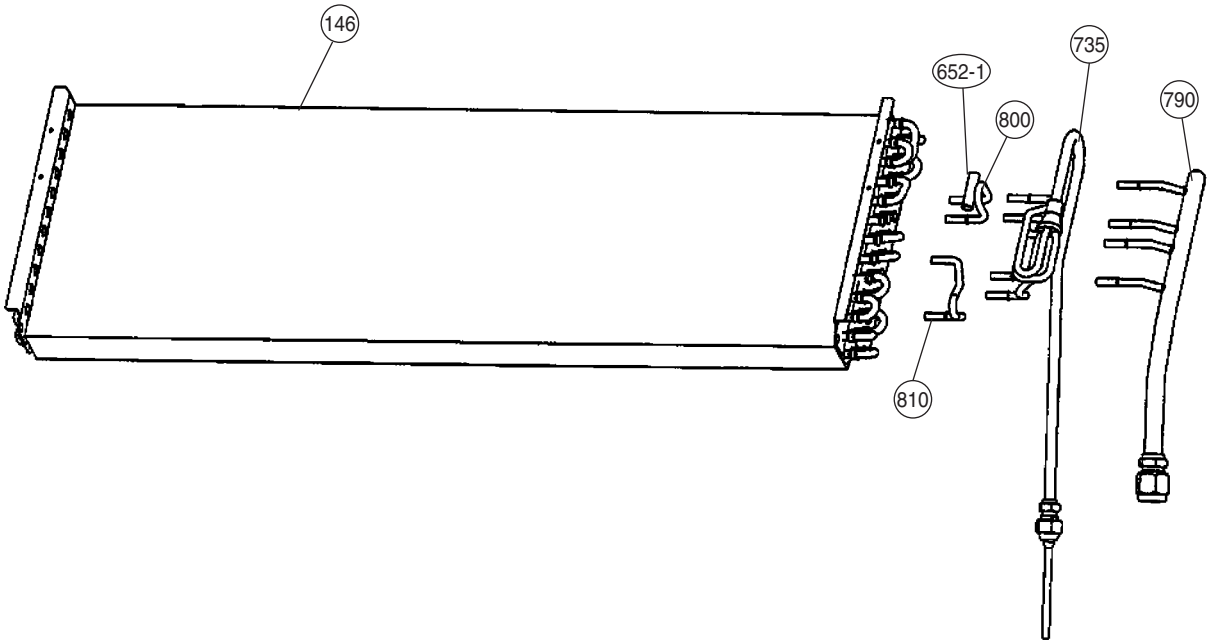

755
653-1
581
56
338
67
164
56
109
126

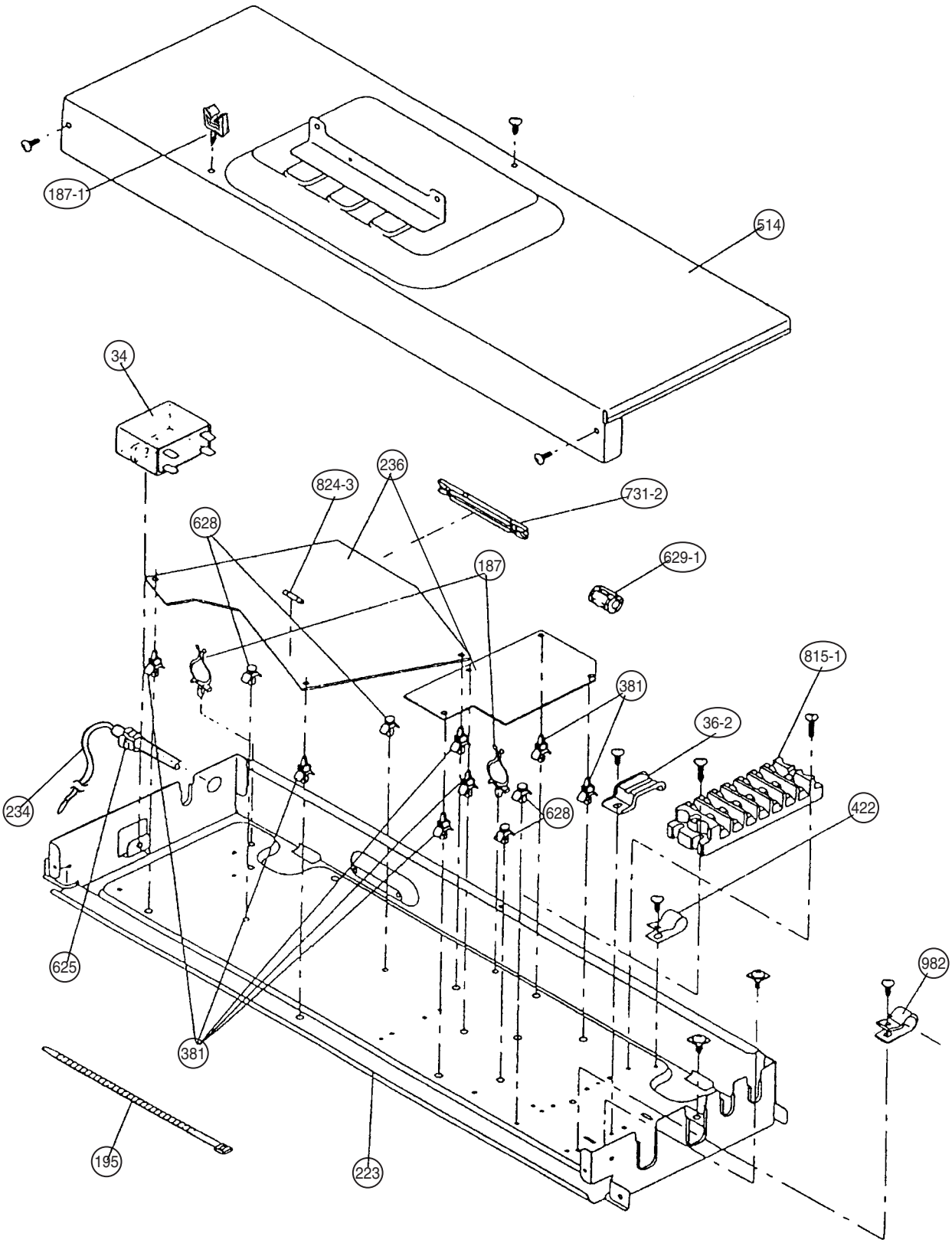

416
385
417
868
771
488
472
443
473
8-1

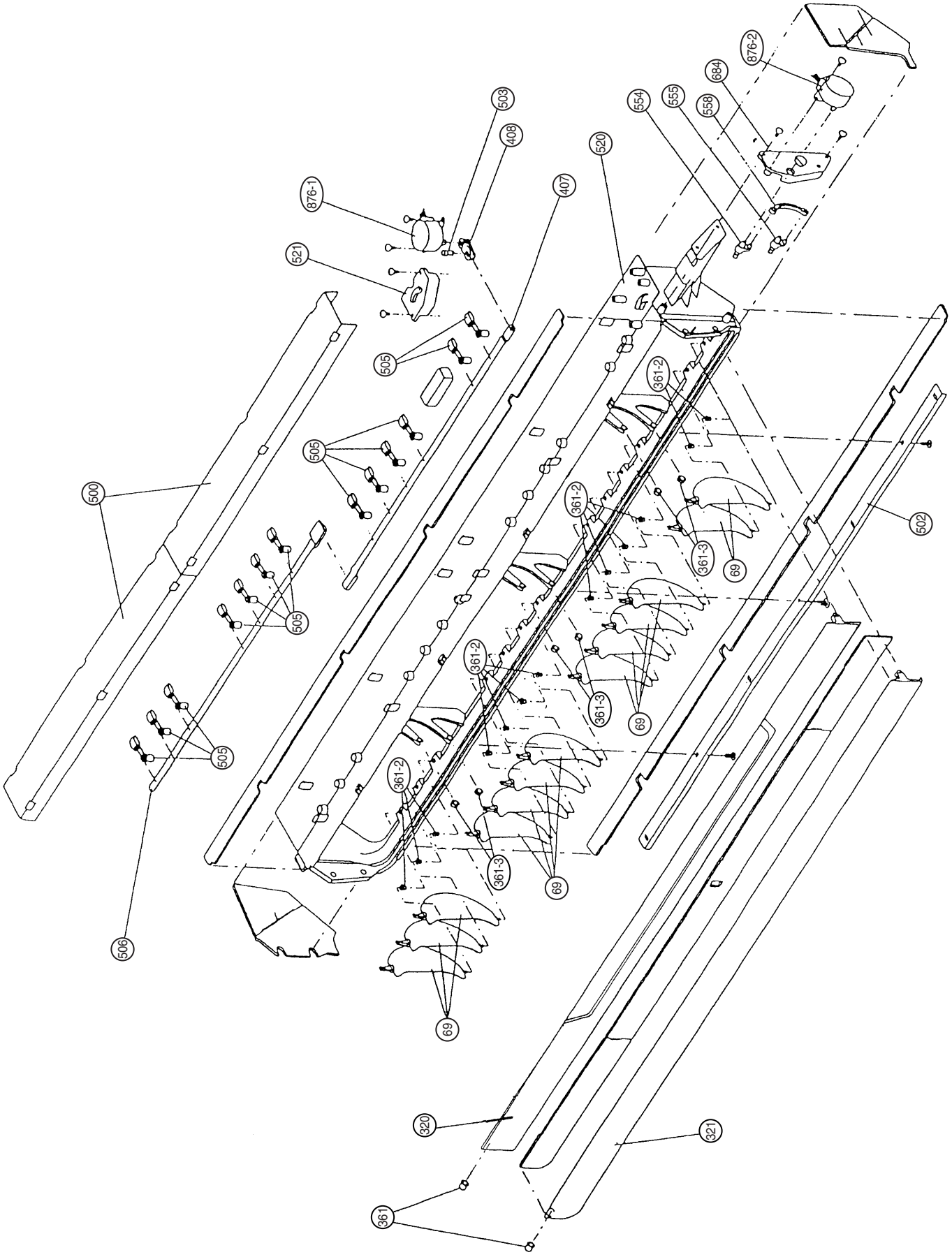
Model : ABY14LBAJ



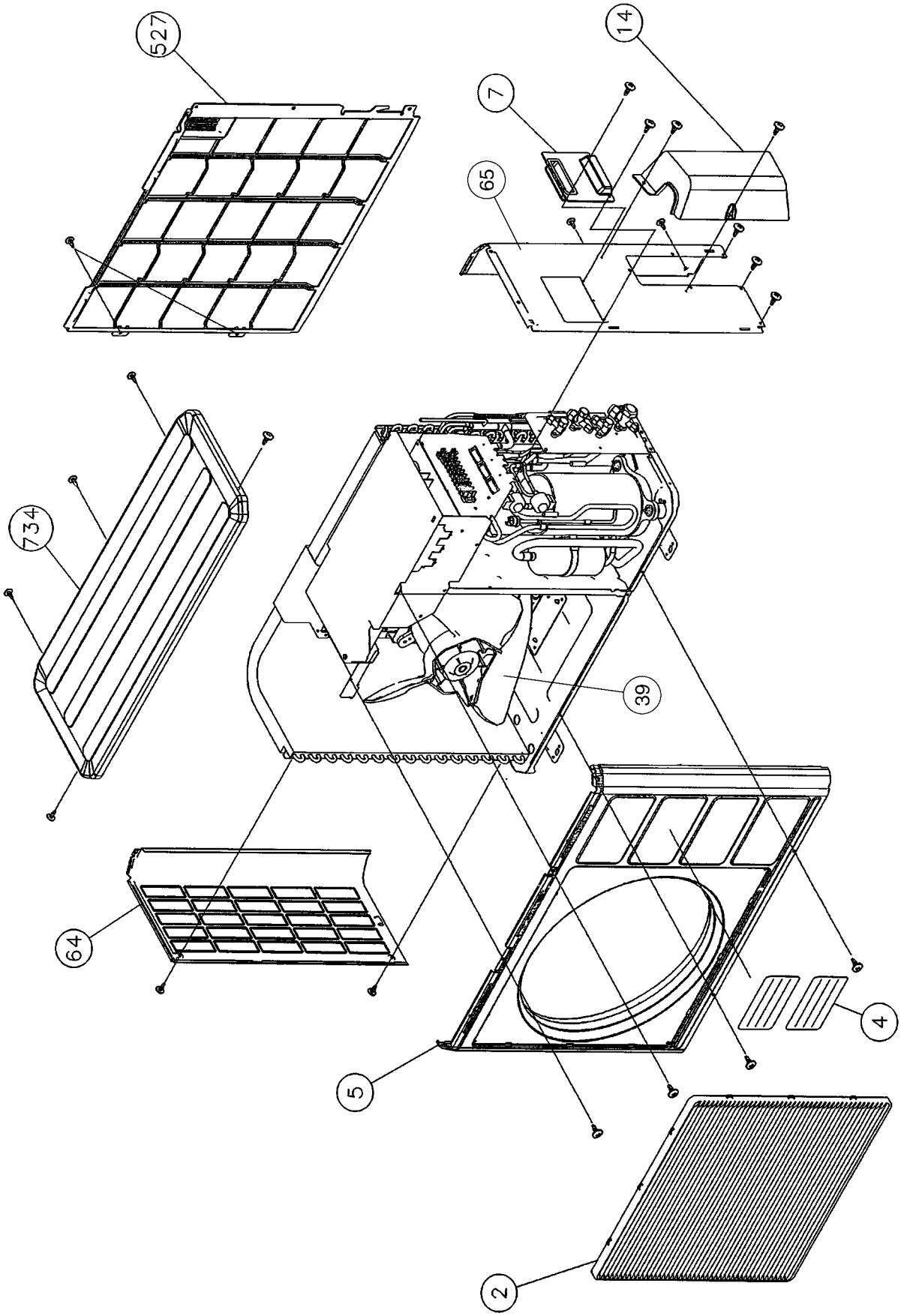
Model : ABY18LBAJ



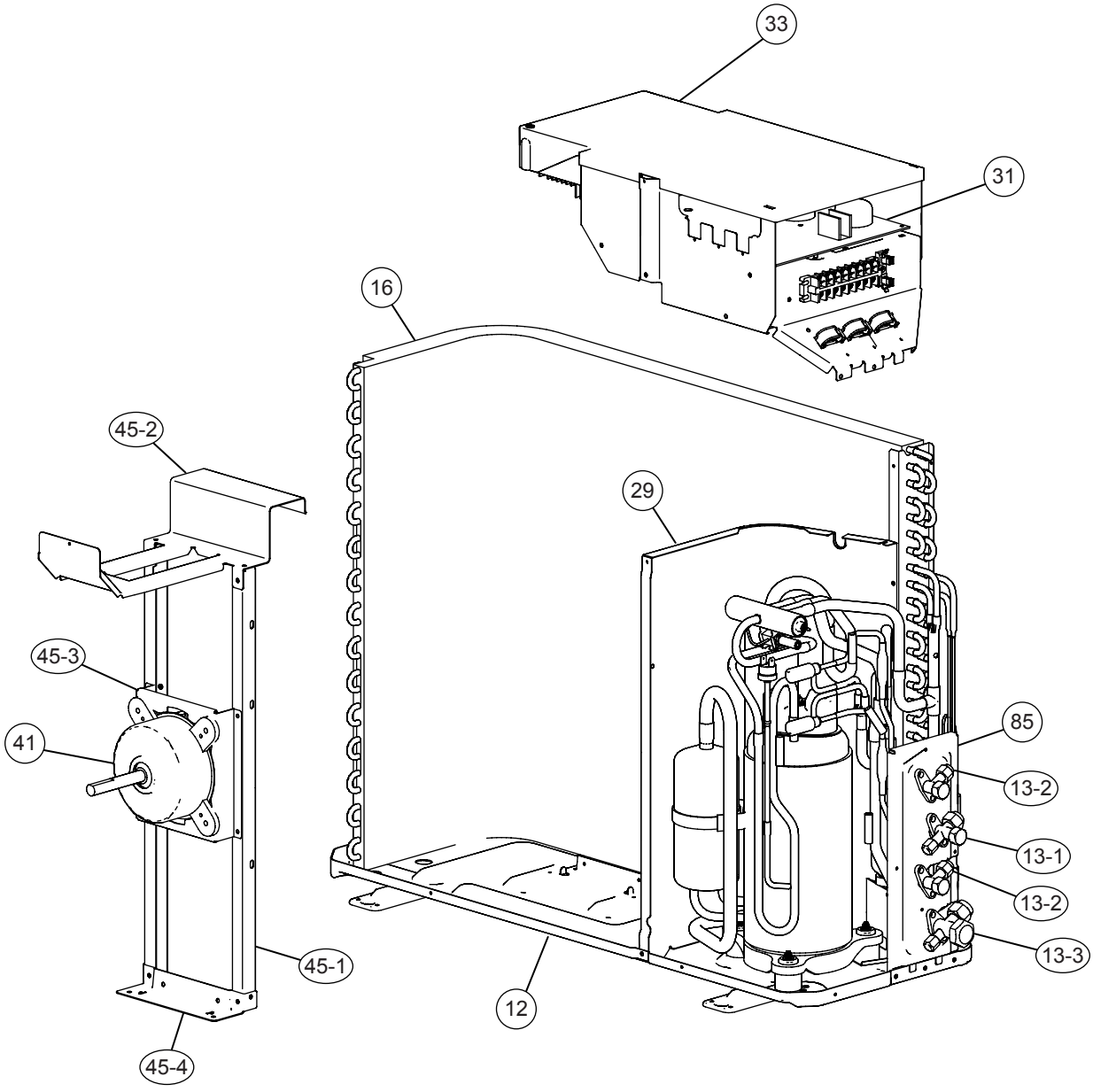

187-1
514
34
236
824-3
731-2
628
629-1
187
815-1
381
36-2
234
628
422
625
982
381
195
223


876-2
684
554
555
558
503
408
520
876-1
407
521
505
361-2
505
500
502
361-3
69
505
361-2
361-3
69
505
361-2
506
361-3
69
69
320
321
361

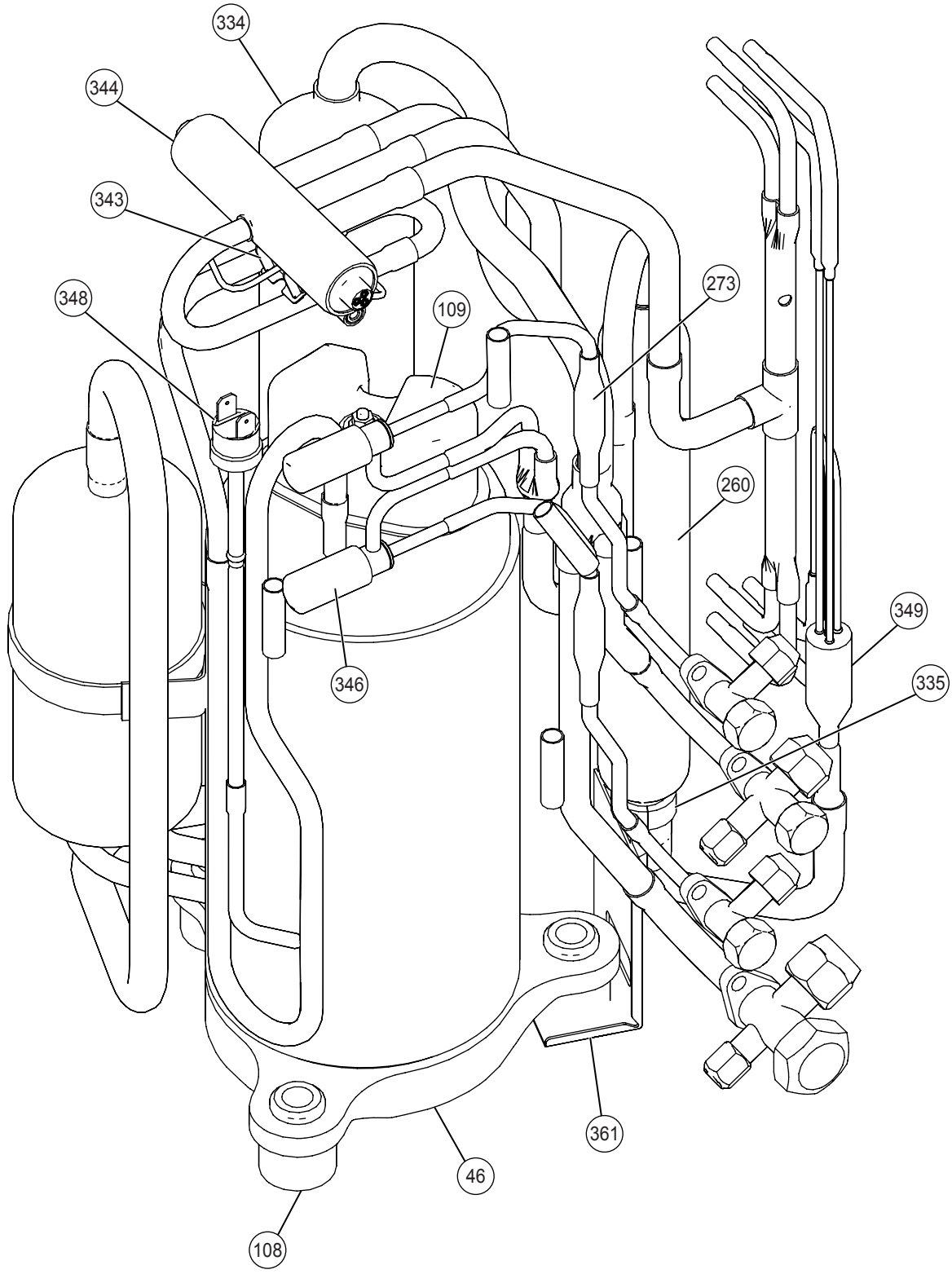
Model : AOY24LMAM2



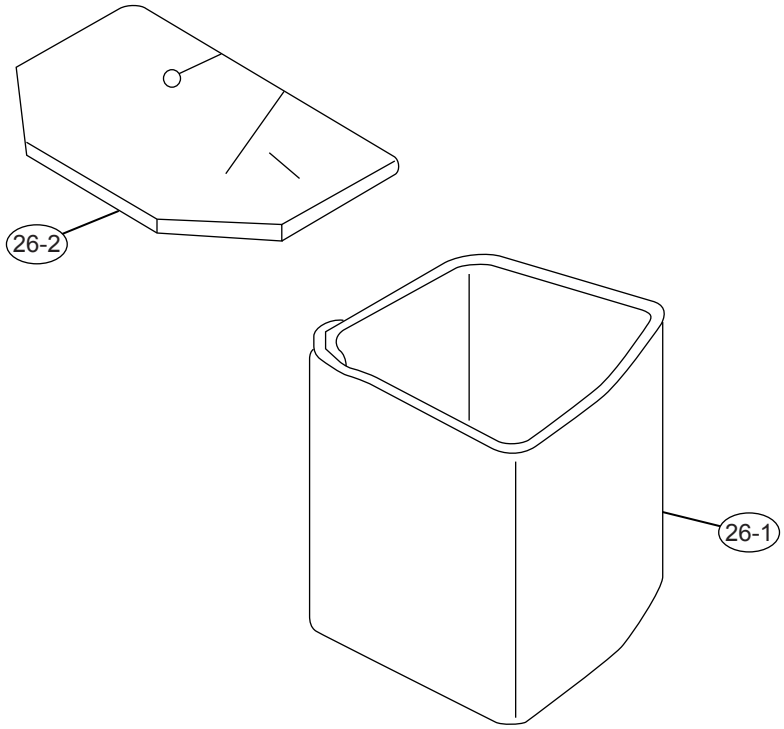
Model : AOY24LMAM2

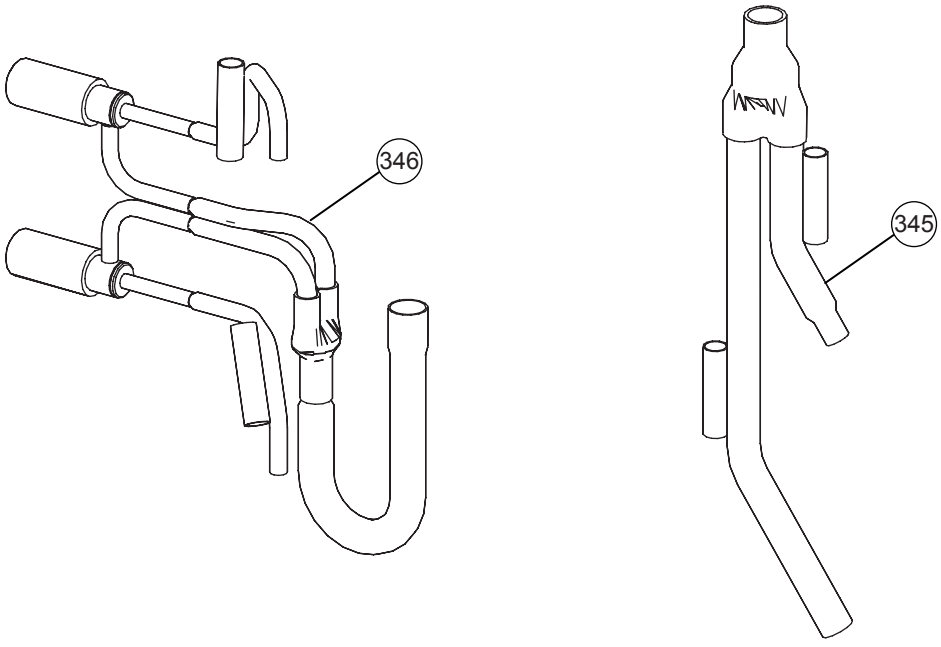


Model : AOY24LMAM2



Model : AOY24LMAM2





PARTS LIST

INDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		ABY14LBAJ	ABY18LBAJ	
8-1	Air Filter	9358567029	9358567029	
34	Capacitor (Fan Motor) 1.6μF/400V	9900270018	---------	
34	Capacitor (Fan Motor) 2.3μF/450V	---------	9900270179	
36-2	Cord Holder Metal	9356362008	9356362008	
56	Sirocco Fan Assy	9385258006	9385258006	
67	Rubber (Vibration-proof)	9385102002	9385102002	
69	Louver	9358561010	9358561010	
68	Cap, Plastic	9358563007	9358563007	
108	Base Assy	9359061038	9359061038	
109	Casing, Plastic	9358543009	9358543009	
124	Dew Proof Plate	9359196006	9359196006	
126	Motor Fixing Table Assy	9358591000	9358591000	
127	Drain Hose Assy	9359242000	9359242000	
138	Separate Wall-A	9358584002	9358584002	
146	Evaporator Assy	9362513029	9362513036	
160	Drain Pan Assy	9358568002	9358568002	
164	Fan Motor Assy-IN	9601527039 (MFA-14JTT)	9601527022 (MFA-18JTT)	
173	Hanger Bracket-L	9358596005	9358596005	
174	Hanger Bracket-R	9358595008	9358595008	
184-1	Thermistor Spring-A	313728262708	313728262708	
187	Clamp No. 1219	313361271706	313361271706	
187-1	Clip (Cable)	9352715006	9352715006	
195	Clamp SKB-100	313361275805	313361275805	
196-1	Clamp SKB-3M	312300787605	312300787605	
223	Control Box	9358600016	9358600016	
234	Thermistor Assy-Room	9703299087	9703299087	
235	Thermistor Assy-Pipe	9900022020	9900022020	
236	Controller PCB Assy	9705914018 (K01AL-0414HSE-F1)	9704557780 (K01AL-040DHSE-F1)	
240	Remote Control Unit AR-JW1	9371190013	9371190013	
320	Flap (Upper)-F	9358538012	9358538012	
321	Flap (Lower)	9358541012	9358541012	
338	Motor Fixture	9358594001	9358594001	
361	Bushing	9357942001	9357942001	
361-2	Bushing-B, Plastic	9358554005	9358554005	
361-3	Bushing-C, Plastic	9358553008	9358553008	
365-1	Special Screw	9359092001	9359092001	
365-2	Special Screw	9359091004	9359091004	
381	Locking Spacer, KGLS-4S	313209391506	313209391506	
385	Indicator PCB Assy EZ-0964HSE-D	9701873012	9701873012	
407	Motor Rod	9358560006	9358560006	
408	Louver Link	9358556009	9358556009	
416	Insulation (Panel)-A	9358574003	9358574003	
417	Insulation (Panel)-B	9358914007	9358914007	
418	Insulation (Flap Base)	9358572009	9358572009	
422	Clamp NK-10N	9359183006	9359183006	
439	Drain Pan Wire	9358598009	9358598009	
443	Arm Bracket	9359281009	9359281009	
470	Separate Wall-B	9358585009	9358585009	

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. Q'ty
		ABY14LBAJ	ABY18LBAJ	
472	Grille Support	9358602003	9358602003	
473	Filter Bracket	9358607008	9358607008	
488	Grill-F	9358532010	9358532010	
500	Protect Cover	9358564004	9358564004	
502	Support Stay	9358599006	9358599006	
503	Louver Shaft	9358557006	9358557006	
505	Louver Stopper	9358555002	9358555002	
506	Louver Rod	9358559000	9358559000	
508	Cosmetic Panel-R	9358535011	9358535011	
509	Cosmetic Panel-L	9358536018	9358536018	
514	Control Box Cover	9359097006	9359097006	
520	Flap Base	9358537015	9358537015	
521	Louver Link Cover	9358558003	9358558003	
552	Insulation (Eva.)-R	9358575000	9358575000	
553	Insulation (Eva.)-L	9358857007	9358857007	
554	Flap Link-Upper (Step Motor-V)	9358551004	9358551004	
555	Flap Link-Lower (Step Motor-V)	9358552001	9358552001	
558	Motor Rod-A (Step Motor-V)	9358550007	9358550007	
574-1	Evaporator Fixture-R (Bracket)	9358589007	9358589007	
574-2	Evaporator Fixture-L (Bracket)	9358590003	9358590003	
577	Catch TL-119	9359096009	9359096009	
578	Base Bracket (Reinforcement Metal)	9358586006	9358586006	
580	Top Cover	9358534014	9358534014	
581	Protector, Metal (Fan Motor)	9359282006	9359282006	
588-1	Evaporator Bracket-R	9358587003	9358587003	
588-2	Evaporator Bracket-L	9358588000	9358588000	
625	Cord Bushing KR-51	9359240006	9359240006	
628	Locking Spacer-B	313005446558	313005446558	
629-1	EMI Filter	0400247074	0400247074	
652-1	Thermistor Holder Pipe	313806262805	313806262805	
653-1	Bolt (Fan Motor Fixing)	0700156014	0700156014	
653-2	Bolt	0700190018	0700190018	
684	Motor Base	9358562000	9358562000	
731-2	Holder (Guide Rail)	0600241018	0600241018	
735	Distributor As	9373034018	9373034032	
743	Remote Control Unit Holder	9305642014	9305642014	
755	Casing Cover	9358544006	9358544006	
764	Drain Cap	9358746004	9358746004	
771	Panel Assy	9359076117	9359076117	
790	Coupring Pipe Assy	-------	9373038153	
800	Bypass Pipe Assy	9373032014	9373032021	
815-1	Terminal 3P	9900203016	9900203016	
824-3	Fuse BET3.15A - 250V	0600222512	0600222512	
868	PCB Holder	9358547007	9358547007	
870-1	Arm	9358565001	9358565001	
870-2	Center Arm	9359280002	9359280002	
875	Power Supply PCB Assy	9704561190 (K01AL-0408HSE-PO)	9704561190 (K01AL-0408HSE-PO)	
876-1	Step Motor-H	9359106012	9359106012	
876-2	Step Motor-V	9359105015	9359105015	
923	Control Box Bracket	9358717004	9358717004	
982	Cord Clamp	9357886008	9357886008	

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

OUTDOOR UNIT

Ref. No.	Description	Part No. AOY24LMAM2	Ord. Q'ty
2	Fan Guard	9371187013	
4	Emblem	9351355005	
5	Front Panel	9371924014	
7	Connecteor Cover (Cabinet)	9366398004	
12	Base Assy	9371920078	
13-1	3-Way Valve	9372205044	
13-2	2-Way Valve	9372204054	
13-3	3-Way Valve	9372205051	
14	Valve Cover	9372796016	
16	Condenser Assy	9372181096	
26-1	Compressor Cover A	9373730019	
26-2	Compressor Cover B	9373730026	
29	Separate Wall	9372795019	
31	Controller PCB Assy	9705285019	
33	Control Cover	9372792018	
39	Propeller Fan Assy	9366378013	
41	Motor Induct	9601671046	
45-1	Motor Bracket	9371929019	
45-2	Motor Bracket-Top	9371931012	
45-3	Motor Bracket-Center	9371930015	
45-4	Motor Bracket-Bottom	9371932019	
46	Compressor Assy	9373262015	
64	Side Panel L	9371926018	
65	Side Panel R	9371927015	
85	Valve Plate	9371928036	
108	Rubber Seat (Comp)	9358080009	
109	Terminal Cover (Comp)	9373264019	
260	Receiver Tank Assy	9373426011	
273	Strainer Assy	9366602019	
334	Accumulator	9368391003	

Ref. No.	Description	Part No. AOY24LMAM2	Ord. Q'ty
335	Accumulator Holder Rubber	9354022010	
343	Solenoid	9900165079	
344	4-Way Valve	9900163013	
345	Joint Pipe (3Way) Assy	9373729129	
346	Expansion Valve Assy	9373729068	
348	Pressure Switch Assy	9373729044	
349	Capirally Assy	9373729211	
361	Accum Support Assy	9372252017	
527	Protective Net	9371934013	
734	Top Panel	9372304013	
---	Gasket (Comp)	9373266013	
---	Washer (Rubber) (Comp)	9358078006	
---	Compressor pressure switch	9900186012	
---	Compressor thermal switch	9373263012	
---	Thermistor Valve	9900194017	
---	Thermistor discharge	9704219039	
---	Heat exchanger thermistor	9704220059	
---	Thermistor outdoor	9703516047	
---	Thermistor heat sink	9900195014	
---	Special Nut M8 (Comp)	9355091008	
---	Condenser Sub Assy	9372313121	
---	Thermister Holder Pipe	313714262805	
---	Clip (Cable)	9352715006	
---	Br Sheet	9363708042	
---	Relay	9900117016	

Inverter Assy

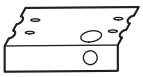
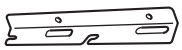
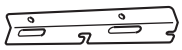
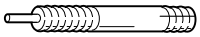
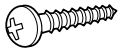
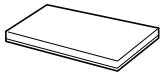
Ref. No.	Description	Part No.	Ord. Q'ty
31	Controller PCB Assy	9705285019	
---	ACTPM	9703457012	
---	Capacitor for PCB	9705387010	
---	Fan Capacitor	9900270049	
---	Fuse	0600086039	
---	Terminal 8P	9900203047	
---	Fuse Holder	0501454012	
---	Terminal 2P	9701971015	

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

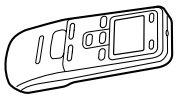
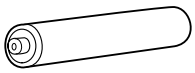
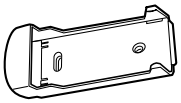
STANDARD ACCESSORIES

The following installation parts are furnished. Use them as required.

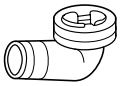
INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	Part No.
Cosmetic Panel-L	1		9358536018
Cosmetic Panel-R	4		9358535011
Tapping screw (ϕ 4 x 10)	2		301171164104
Installation template 	1	For positioning the indoor unit. For under ceiling type.	9359107002
Hanger bracket (left) 	1	For suspending the indoor unit from ceiling.	9358596005
Hanger bracket- (right) 	1		9358595008
Anchor bolt (M12) 	4		313806339400
Special nut	4		
Spring washer	4		301821112213
Wall bracket	2	For suspending the indoor unit on the wall.	9358597002
Tapping screw (ϕ 4 x 20) 	6	For fixing the wall bracket.	301141164200
Coupler heat insulator (large)	1	For indoor side pipe joint. (Large pipe)	9350716012
Coupler heat insulator (small)	1	For indoor side pipe joint. (Small pipe)	313209328104
Nylon fastener (small)	1	For fixing the drain hose.	312300787605
Drain hose	1		9359242000
Insulation (drain hose) 	1	Adhesive type 70 x 230	9359225003
VT wire	1	For fixing the drain hose L 280 mm	313806350303

REMOTE CONTROL UNIT

Name and Shape	Q'ty	Application	Part No.
Remote control unit 	1	Use for air conditioner operation (AR-JW1)	9371190013
Battery (penlight) 	2	For remote control unit	0600185534
Remote control unit holder 	1	For mounting the remote control unit	9305642014
Tapping screw (ϕ 3 x 12)	2	For remote control unit holder installation	301141533125

OUTDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Drain pipe 	9303029015
Drain cap	313166024302
Adapter D (1/2" → 3/8") 12.7mm → 9.52mm	9370244007