

FUJITSU ELECTRIC

HIGH POWER MULTI AIR CONDITIONER WALL MOUNTED CASSETTE type

SERVICE MANUAL



Models

Indoor unit

Outdoor unit

RSM-12FA
RSM-7FA



ROM-20FA2

RCM-12FA
RSM-7FA



ROM-20FA2

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SPECIFICATIONS

TYPE	COOL		
INDOOR UNIT	RSM-12FA	RSM-7FA	RCM-12FA
OUTDOOR UNIT	HOM-20FA2		
COOLING CAPACITY (kW)	3.50	2.20	3.50

COOL	
RSM-12FA + RSM-7FA	RCM-12FA + HSM-7FA
ROM-20FA2	
5.70	

ELECTRICAL DATA

POWER SOURCE (V)	230		
FREQUENCY (Hz)	50		
RUNNING CURRENT (A)	5.9	4.0	5.9
INPUT WATTS (kW)	1.34	0.87	1.34
E.E.R. (kW/kW)	2.61	2.53	2.61
MOISTURE REMOVAL (ℓ /hr)	1.3	1.0	1.3
AIR CIRCULATION-HI (m³/hr)	520	440	550

230
50
9.1
2.03
2.81
2.3
3,000 (Outdoor Unit)

COMPRESSOR (Two compressors in one outdoor unit)

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor, Rotary		
POWER SOURCE	230V - 50Hz		
DISCRIMINATION	802-354-35B	802-100-65B	802-354-35B
REFRIGERANT R410A (g)	800	700	800

FAN MOTOR

POWER SOURCE (V)	230		
INDOOR UNIT	HI-SPEED (r.p.m.)	1,310	760
	MED-SPEED (r.p.m.)	1,230	690
	LO-SPEED (r.p.m.)	1,150	610
	QUIET (r.p.m.)	1,080	-----
OUTDOOR UNIT (r.p.m.)	730		

DIMENSIONS

INDOOR UNIT H x W x D (mm)	257 x 808 x 187	235 x 580 x 580 + 70
OUTDOOR UNIT H x W x D (mm)	700 x 900 x 350	

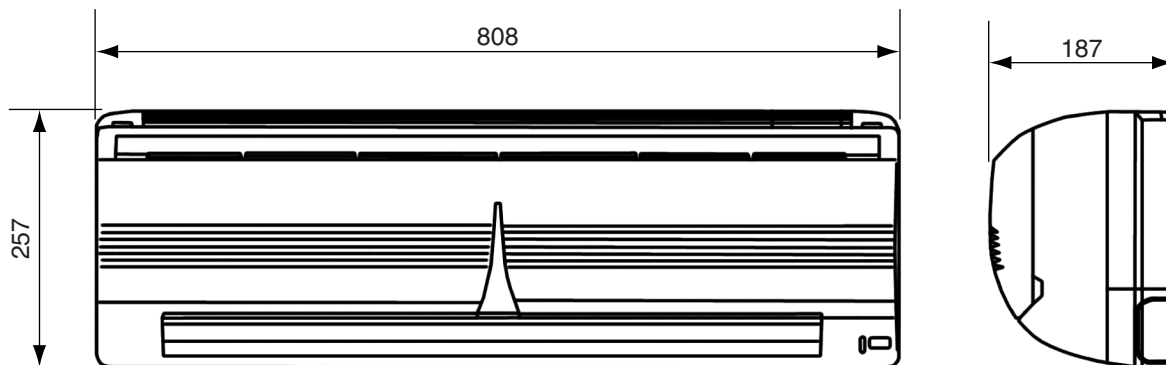
WEIGHT

INDOOR UNIT GROSS / NET (kg)	10 / 8	23 / 18
OUTDOOR UNIT GROSS / NET (kg)	72 / 65	

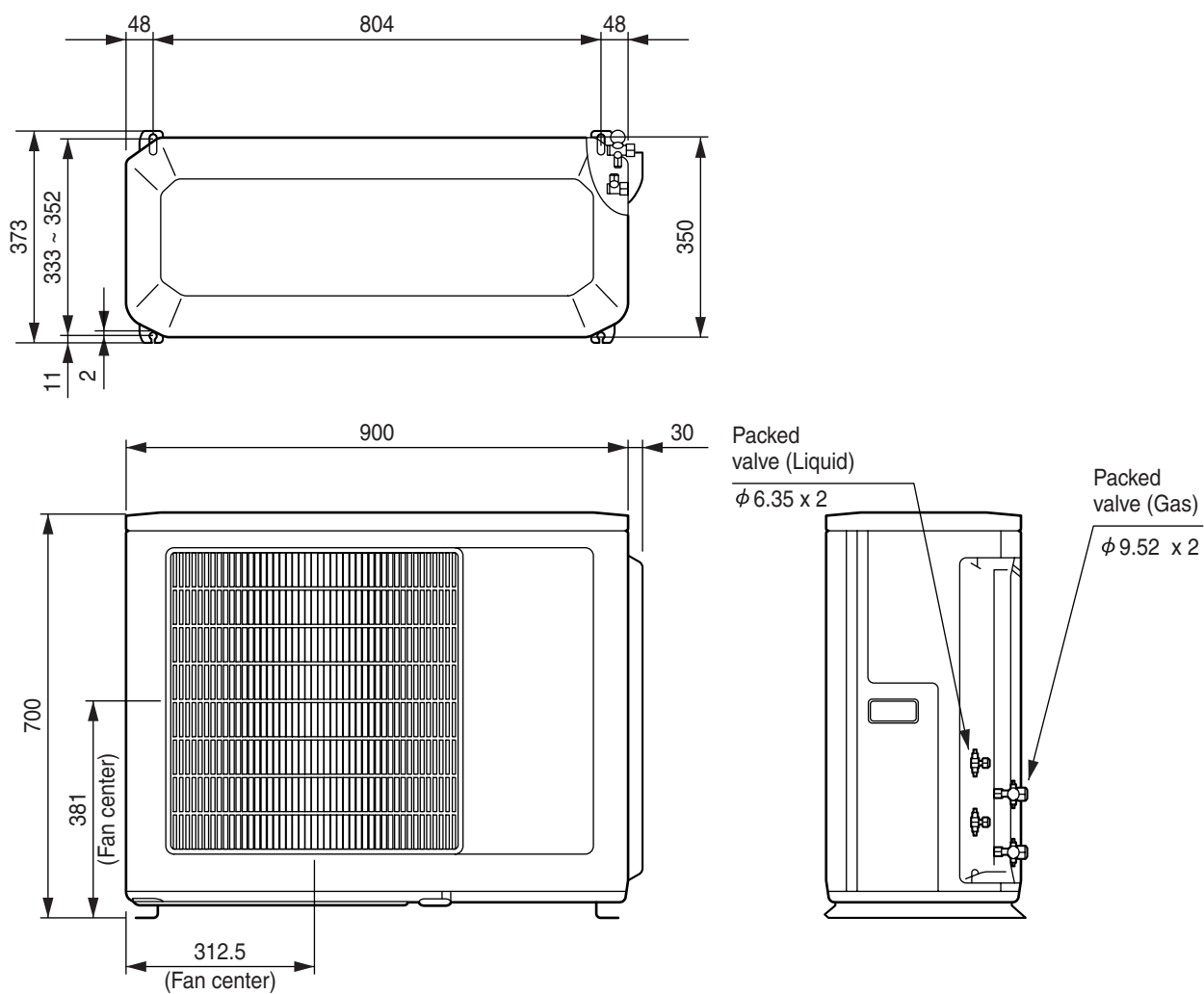
OUTLINE AND DIMENSIONS

Unit : mm

INDOOR UNIT (Wall Mounted type)

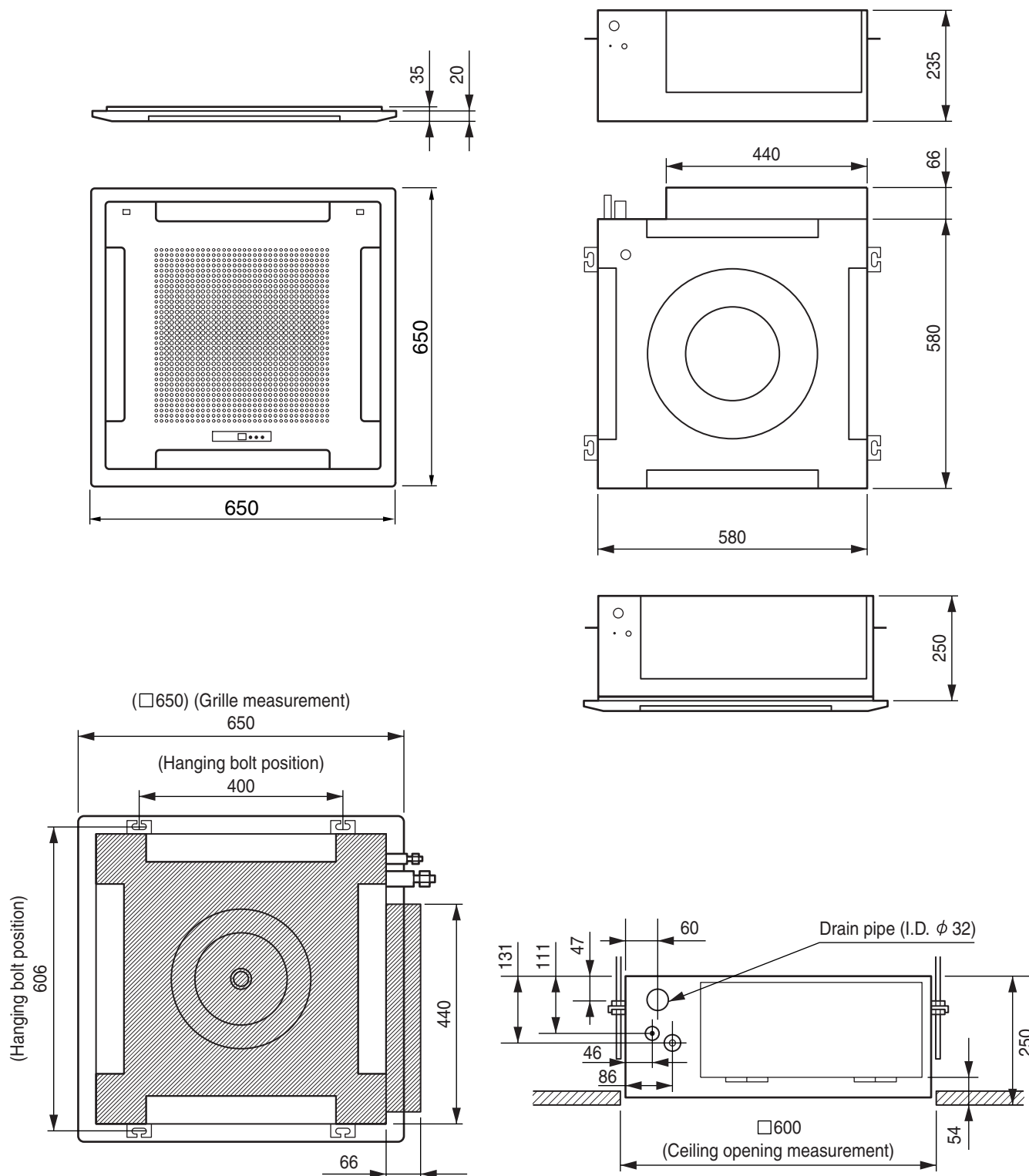


OUTDOOR UNIT

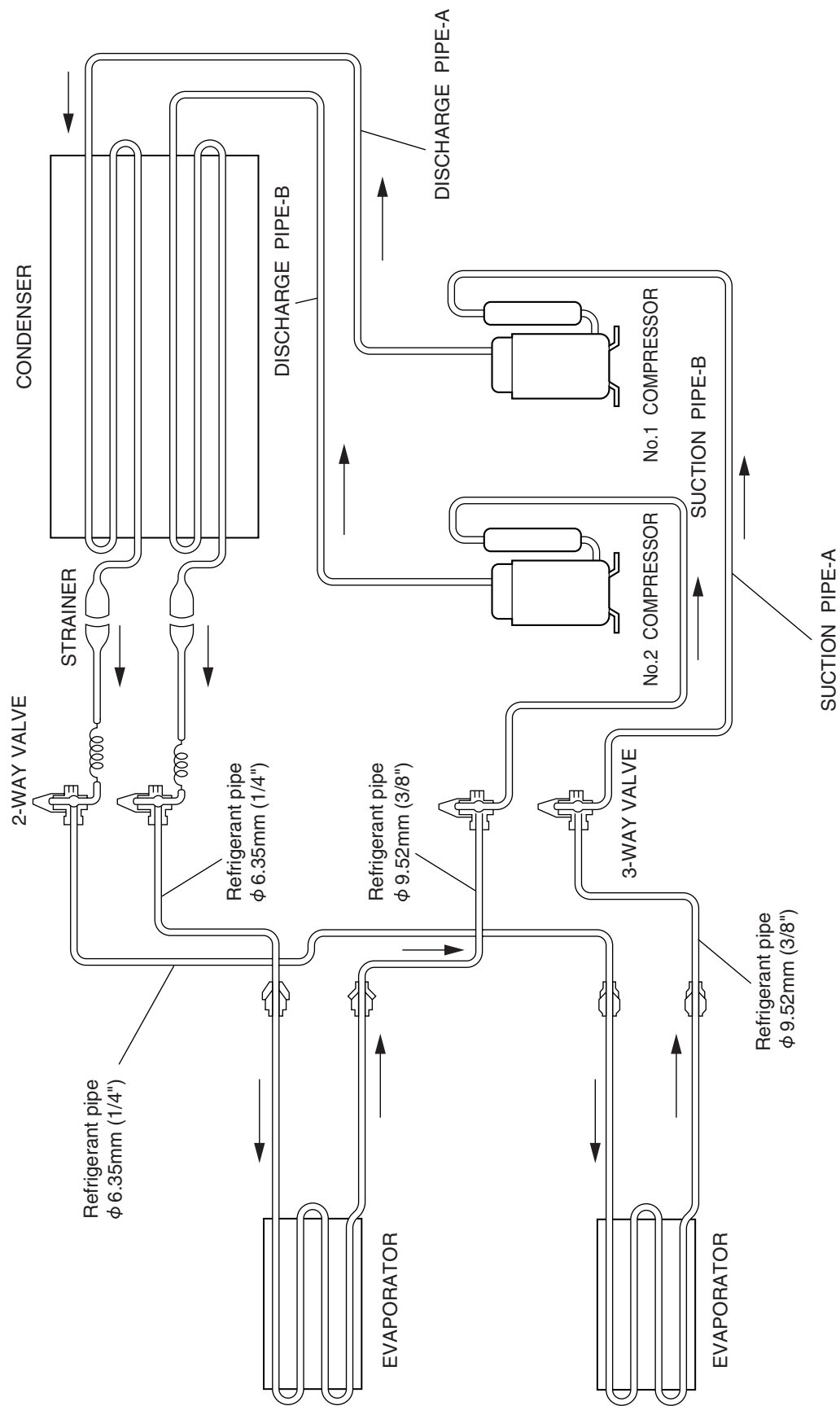


INDOOR UNIT (Cassette type)

(unit : mm)



REFRIGERANT SYSTEM DIAGRAM



ERROR CONTENTS

INDOOR UNIT (WALL MOUNTED TYPE)

○ : Fast flashing ● : Slow flashing

Operation lamp : Red lamp

Timer lamp : Green lamp

Large division indication			Small division indication		
Error contents	LED indication		Error contents	LED indication	
thermistor error	Red lamp Green lamp	● (2 times) ○	thermistor error (room temp.)	Red lamp	○
			thermistor error (heat exchanger)	Green lamp	● (2 times)
control unit error (indoor unit)	Red lamp Green lamp	● (4 times) ○	MANUAL AUTO button error	Red lamp	○
			power source Hz decision error	Green lamp	● (2 times)
fan motor error (indoor unit)	Red lamp Green lamp	● (6 times) ○	lock error	Red lamp	○
			r.p.m error	Green lamp	● (2 times)
				Red lamp	○
				Green lamp	● (3 times)

When an error occurs, "Large division indication" is indicated first.

Secondly, "Small division indication" is indicated by pushing "Test" button of remote controller.

INDOOR UNIT (CASSETTE TYPE)

○ : Fast flashing ● : Slow flashing

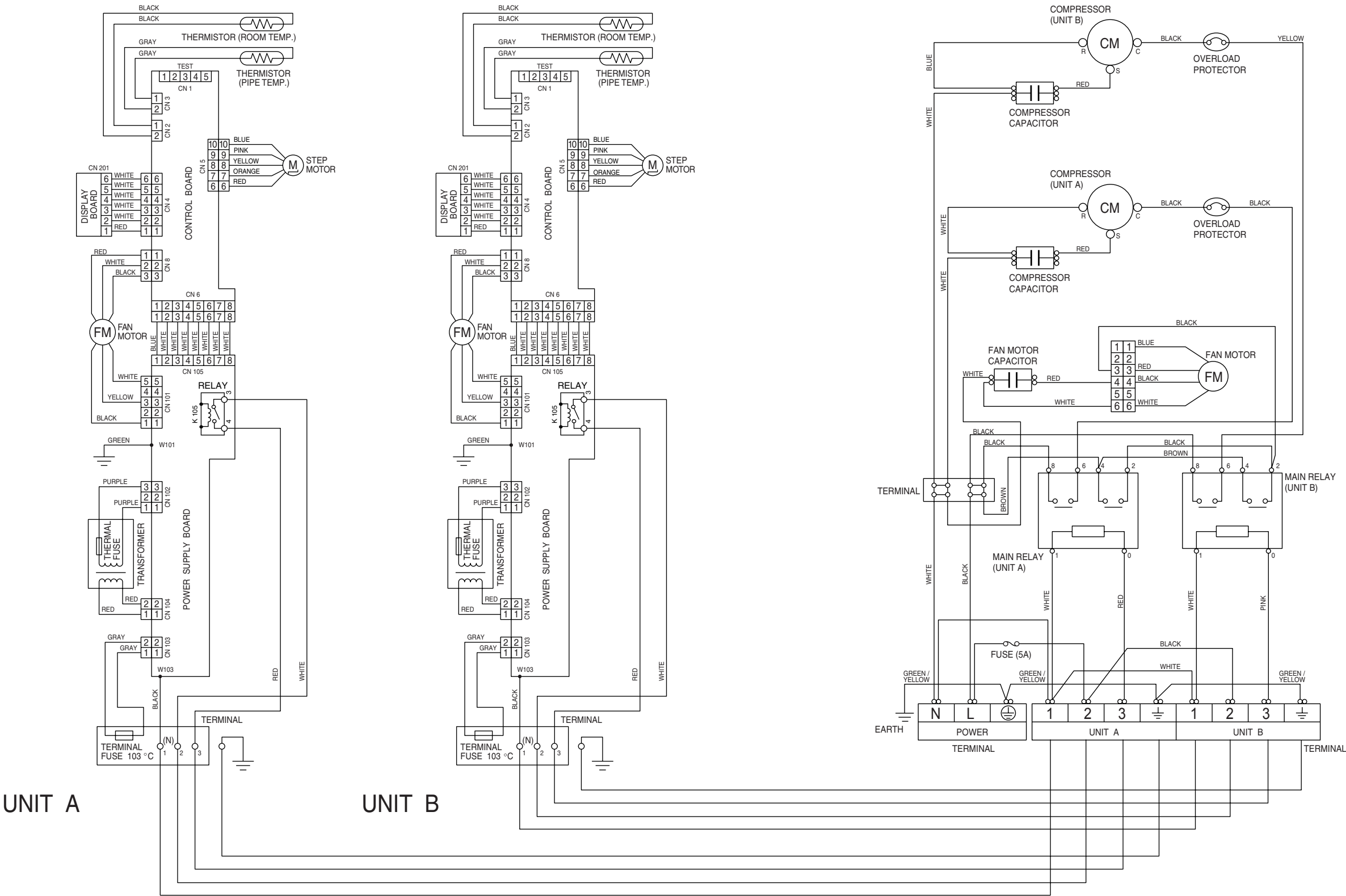
Error display			Error contents
OPERATION lamp	TIMER lamp	SWING lamp	
○	○	Goes off	Model information abnormal (permanent type)
● 4 times	○	Goes off	Drain abnormal (permanent type)
● 6 times	○	Goes off	Indoor fan abnormal
● 2 times	○	Goes off	Room air temperature thermistor open circuit
		○	Room air temperature thermistor short circuit
● 3 times	○	Goes off	Piping thermistor open circuit
		○	Piping thermistor short circuit

CIRCUIT DIAGRAM

Models : RSM-12FA
RSM-7FA
ROM-20FA2

INDOOR UNIT

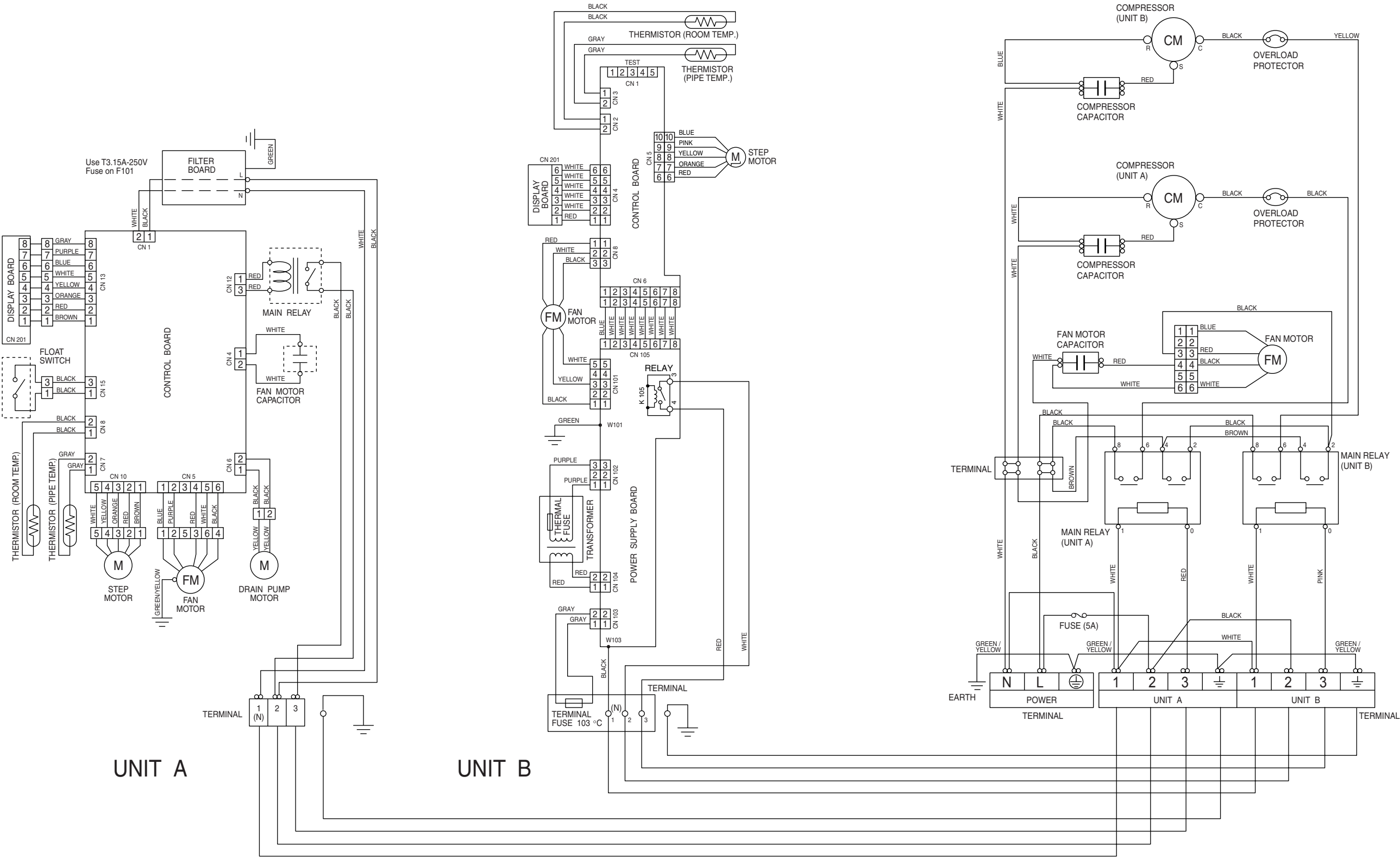
OUTDOOR UNIT



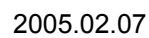
Models : RCM-12FA
RSM-7FA
ROM-20FA2

INDOOR UNIT

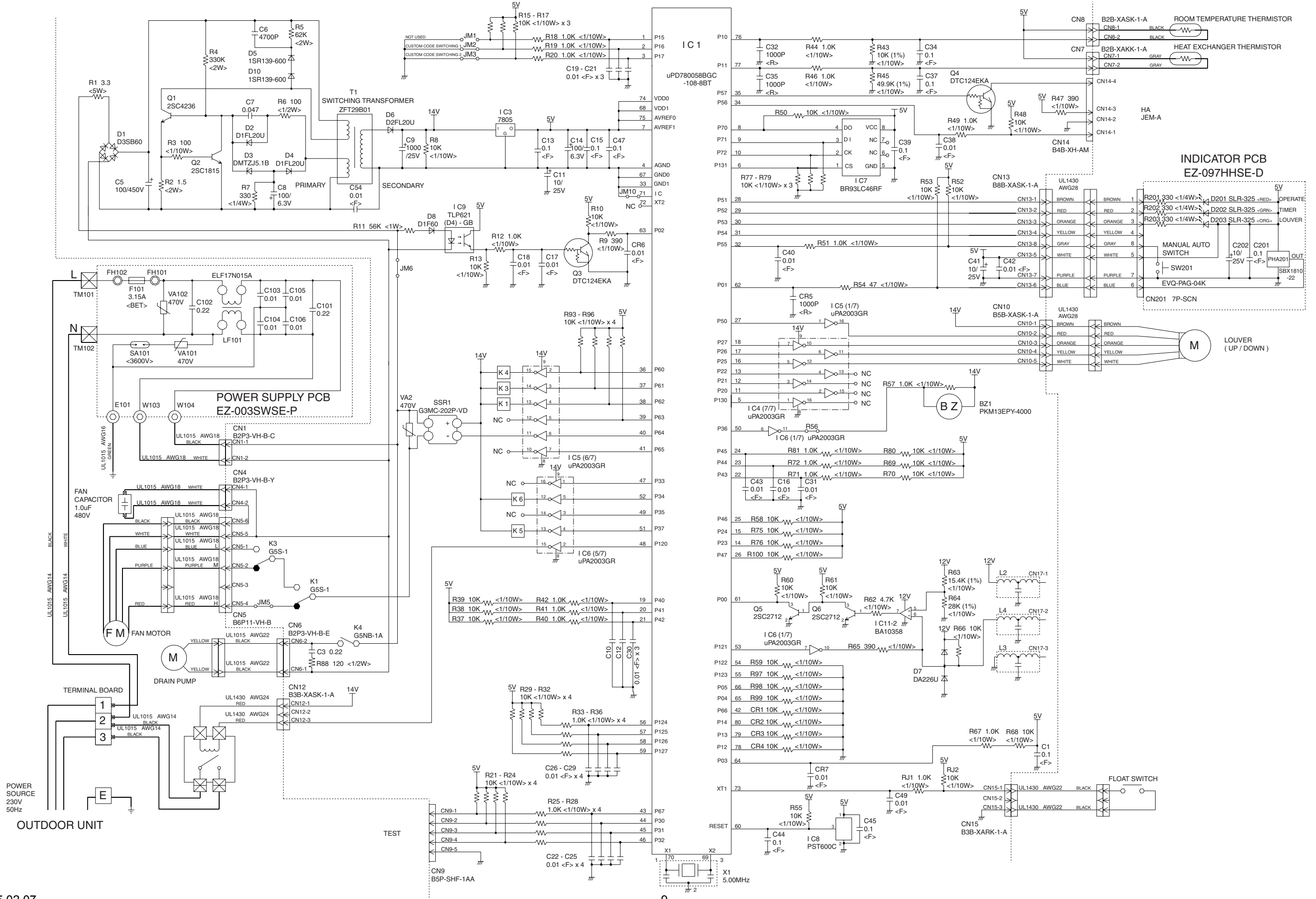
OUTDOOR UNIT



Models : RSM-12FA
RSM-7FA

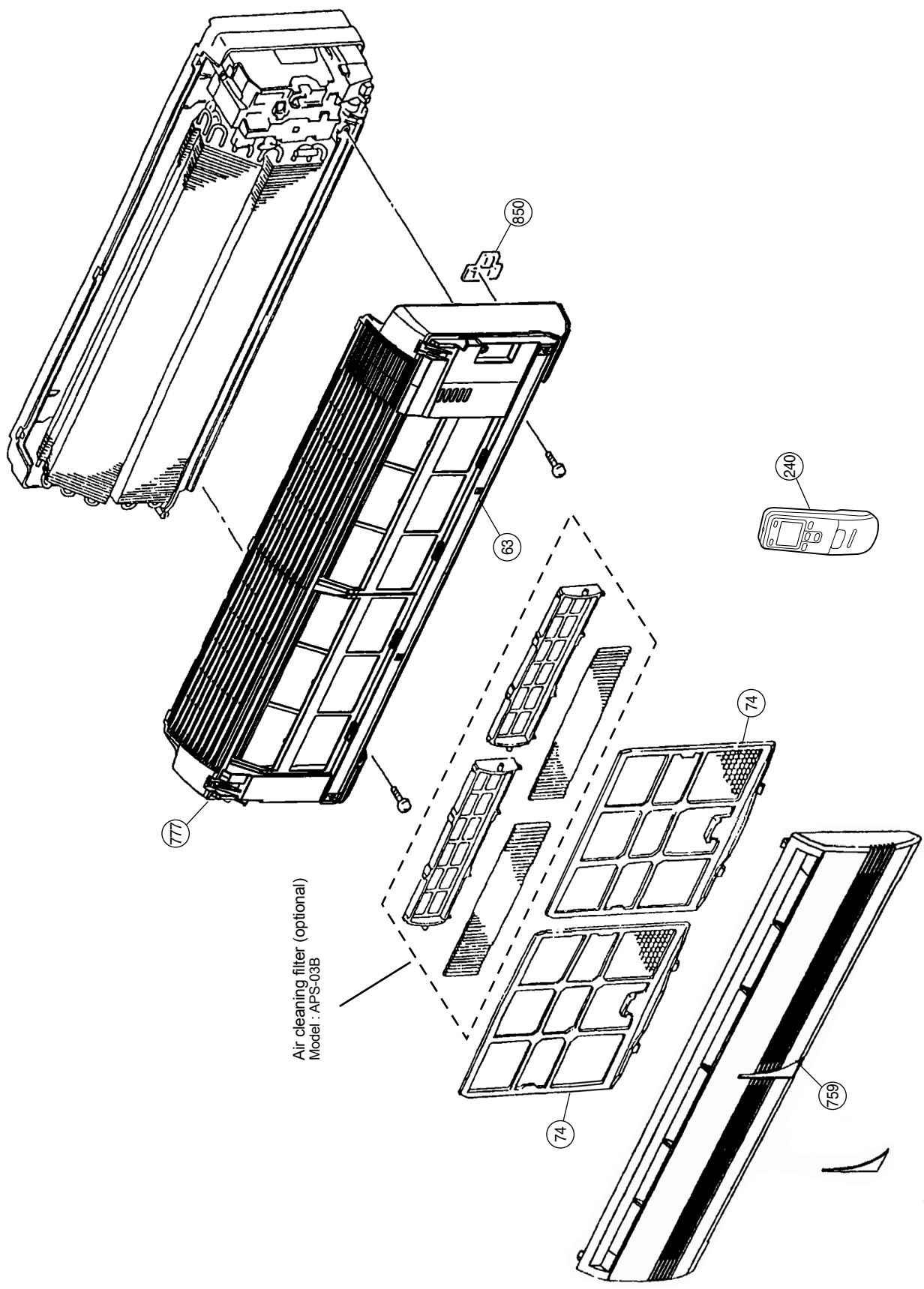


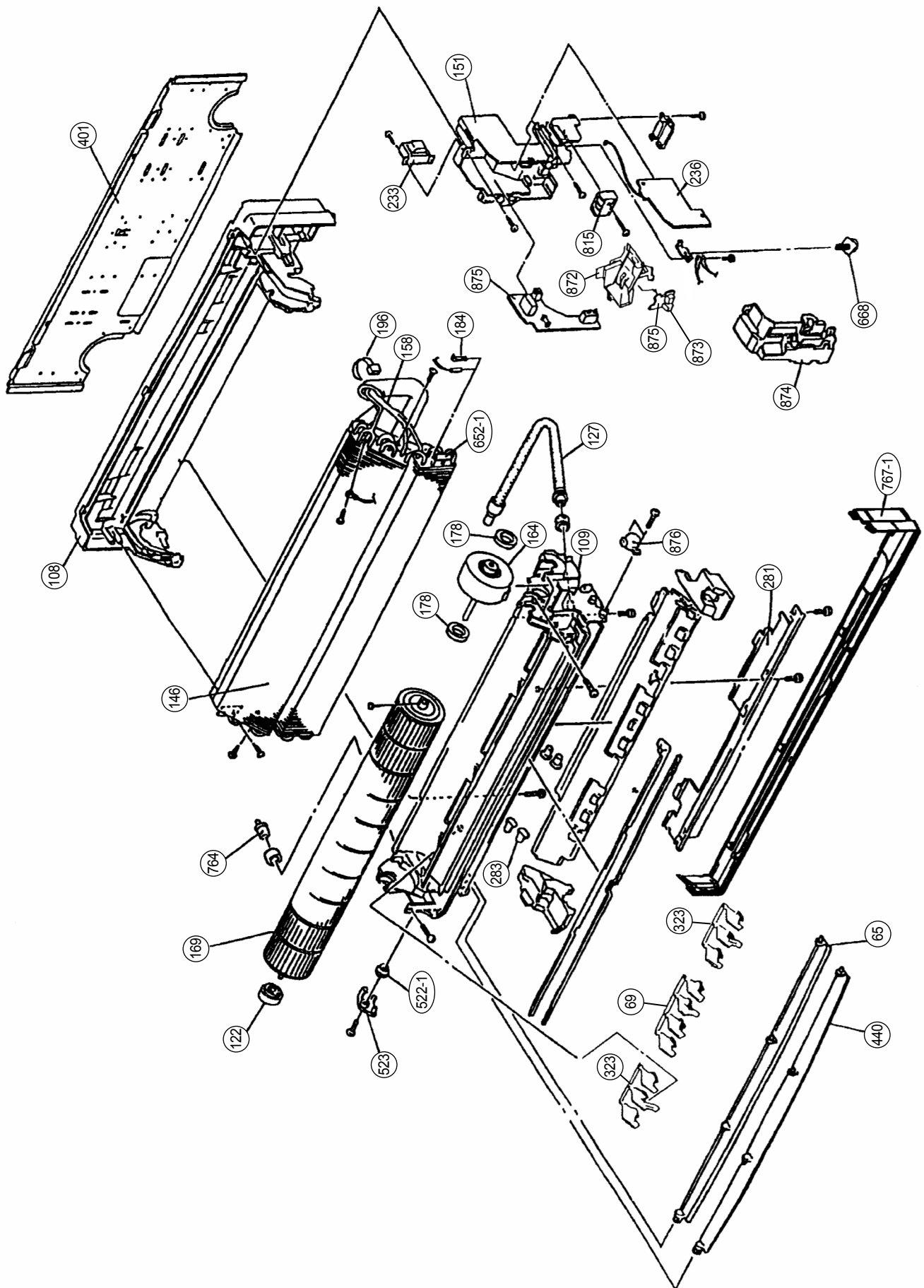
CONTROLLER PCB ASSEMBLY (MAIN PCB)
K01AL-040FWSE-C1

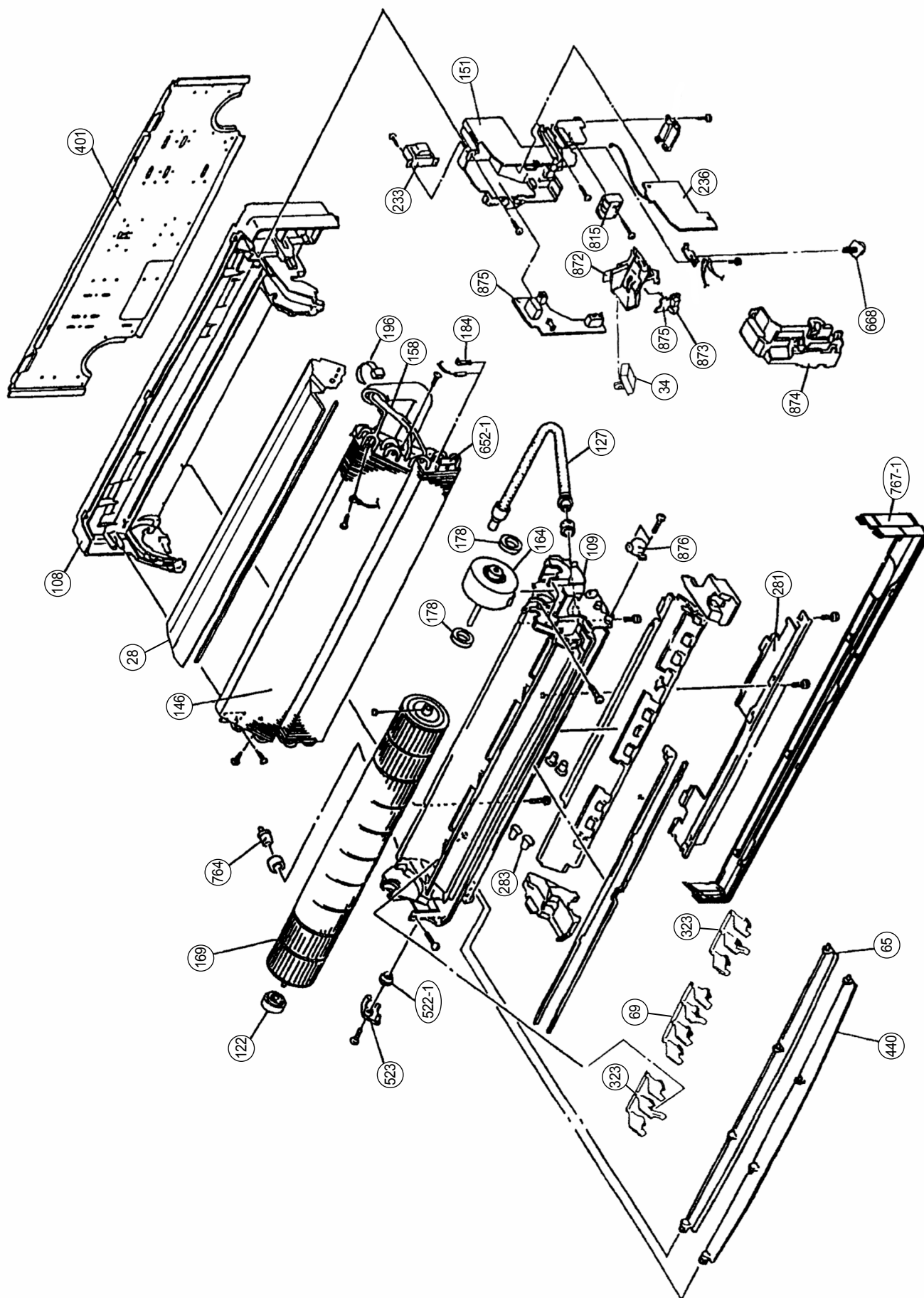


DISASSEMBLY ILLUSTRATION

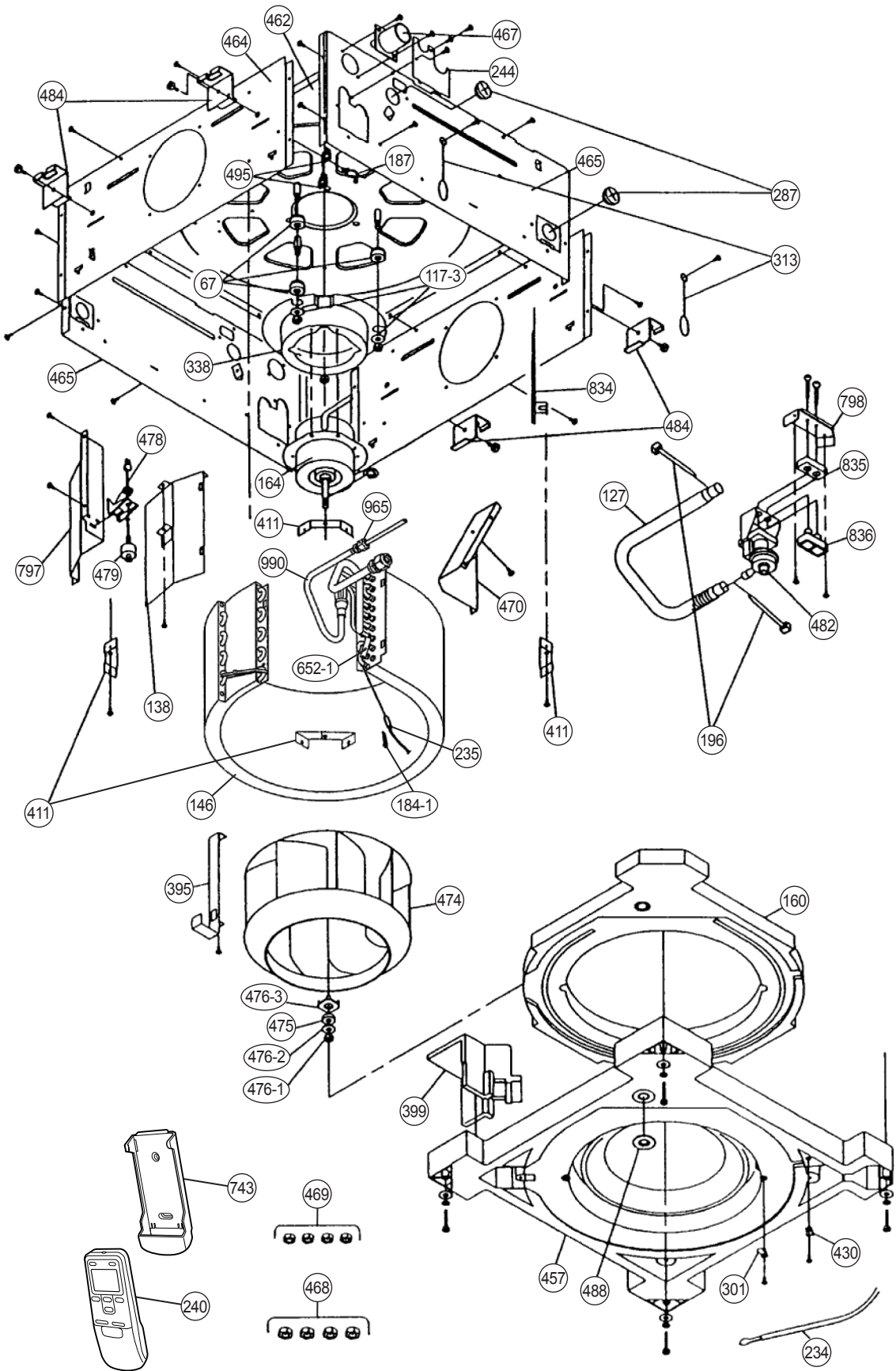
Models : RSM-12FA
RSM-7FA



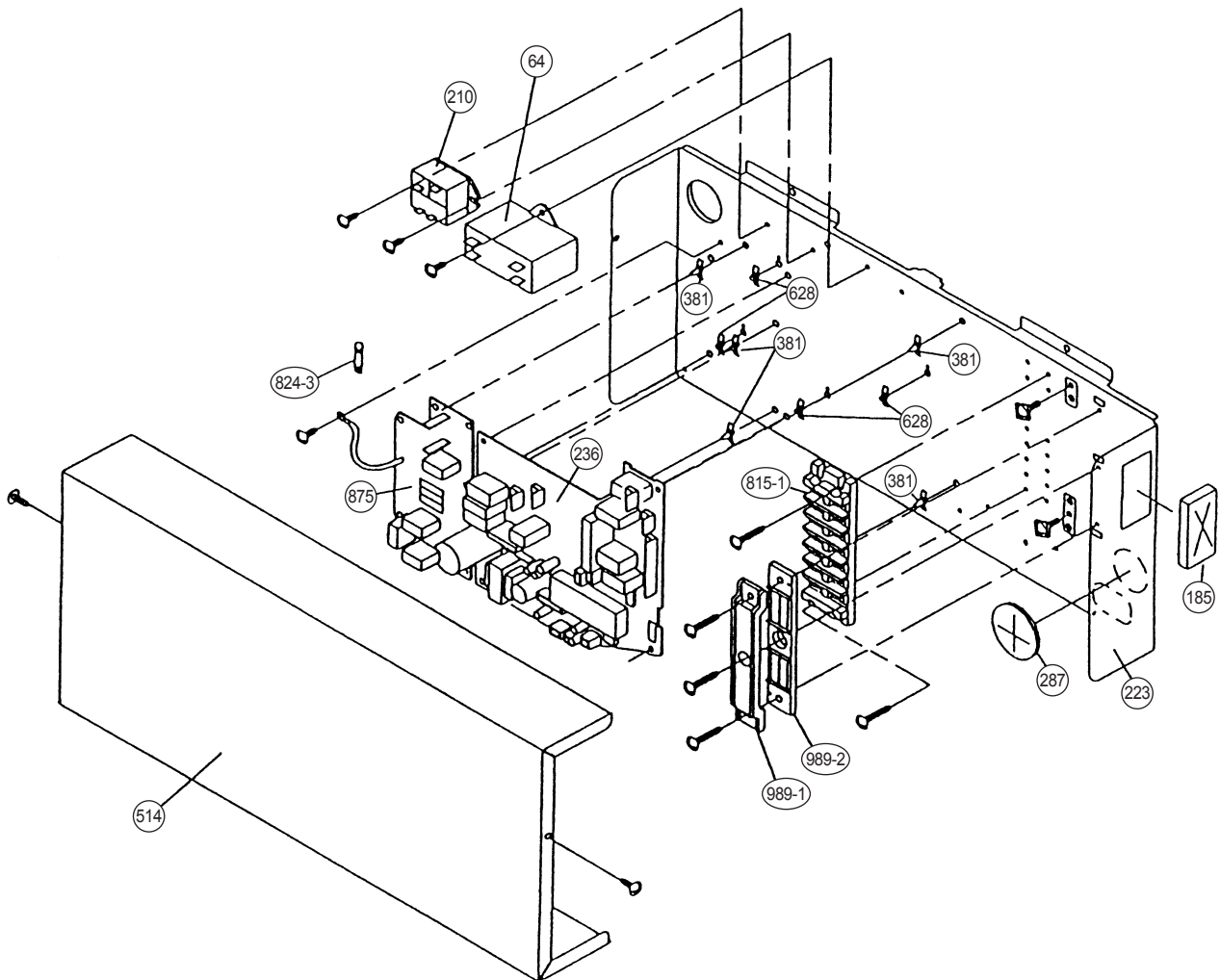




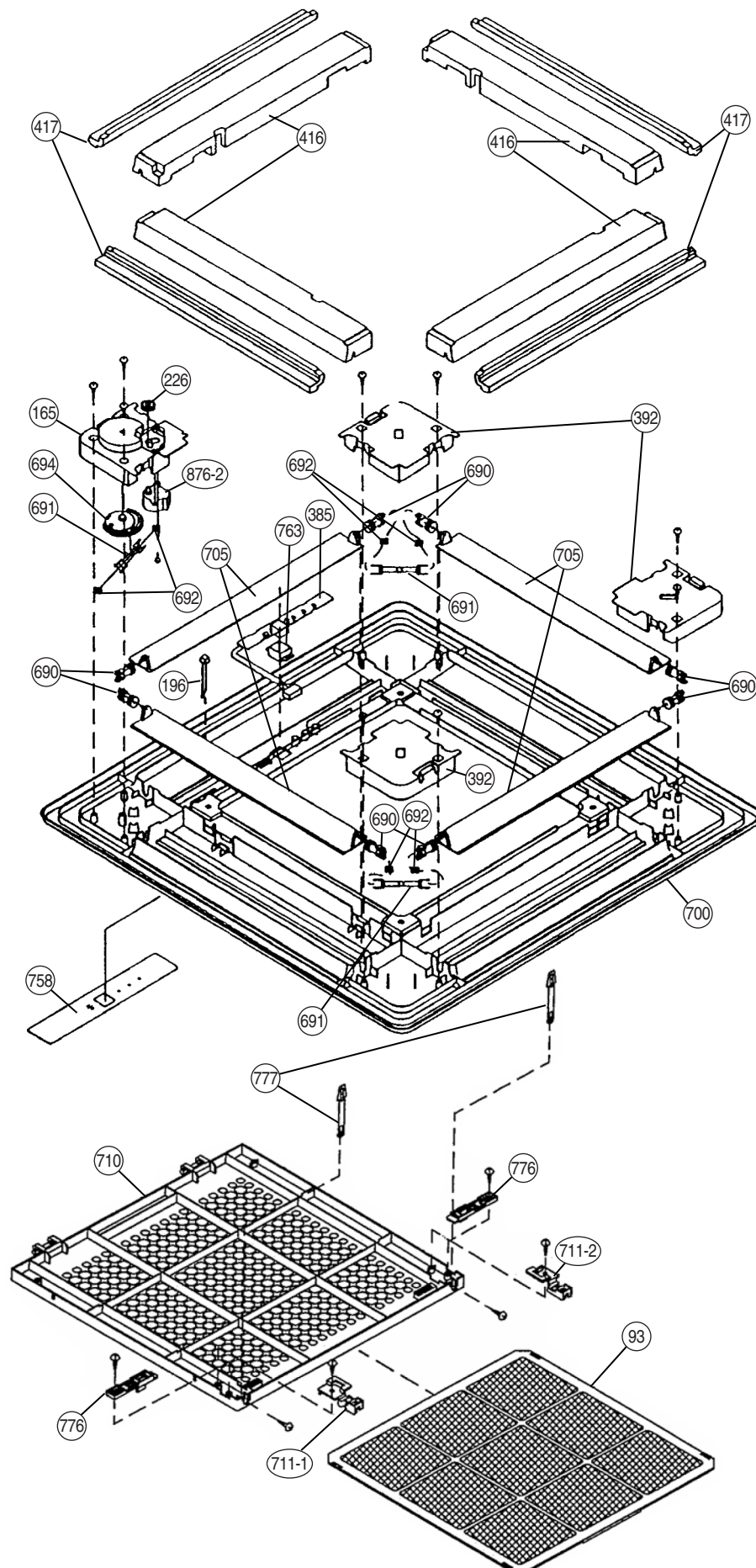
Model : RCM-12FA

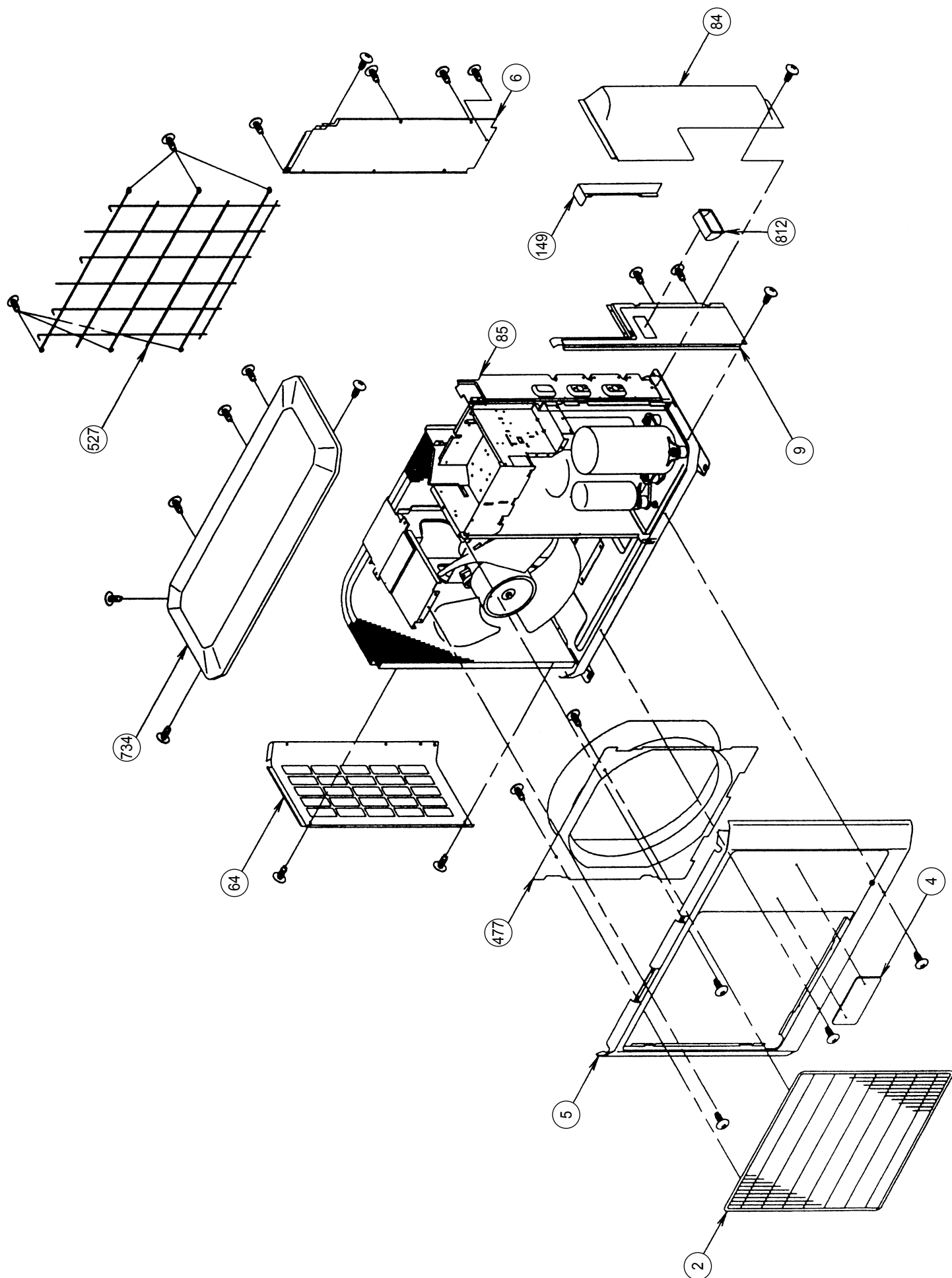


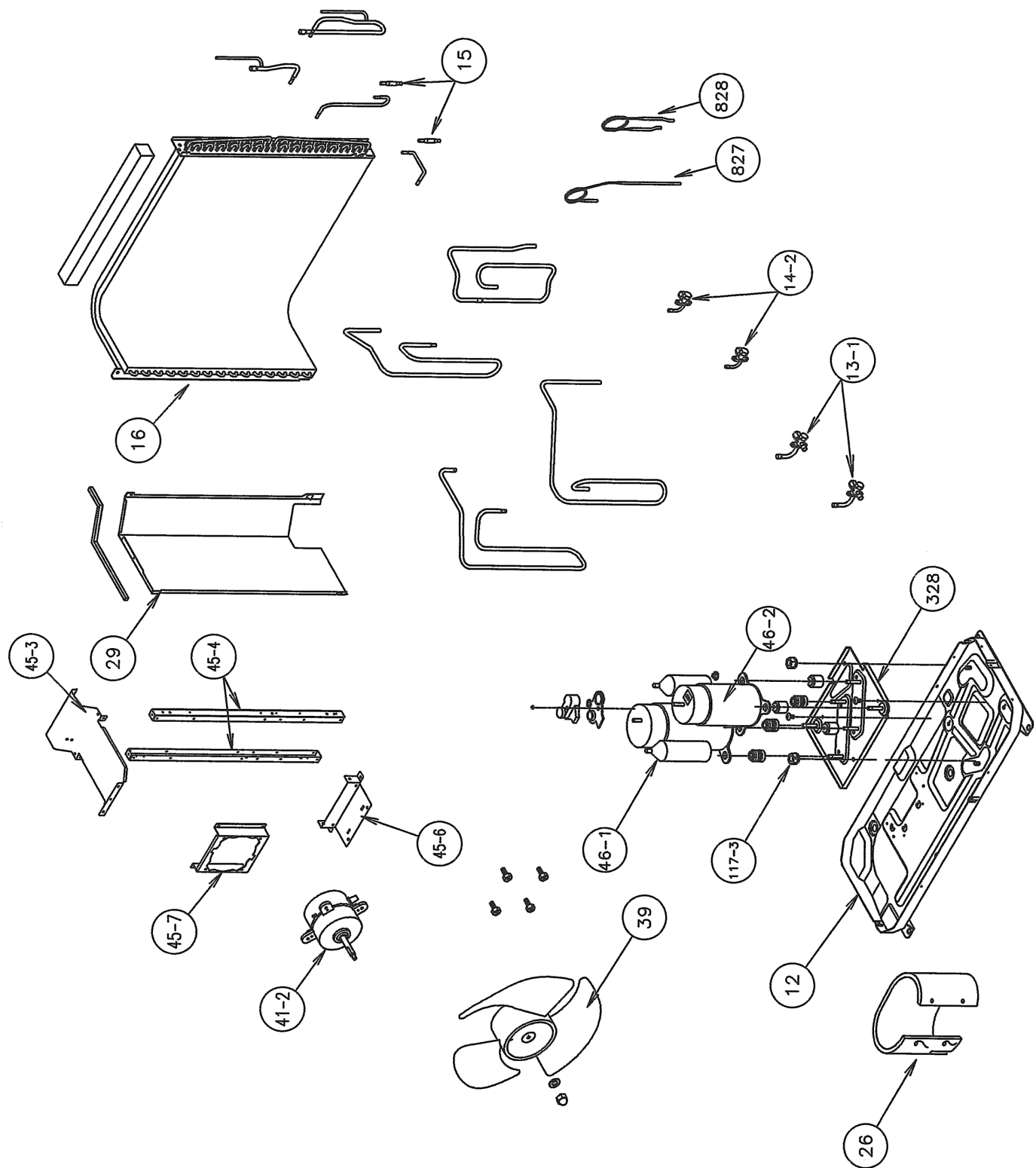
Model : RCM-12FA



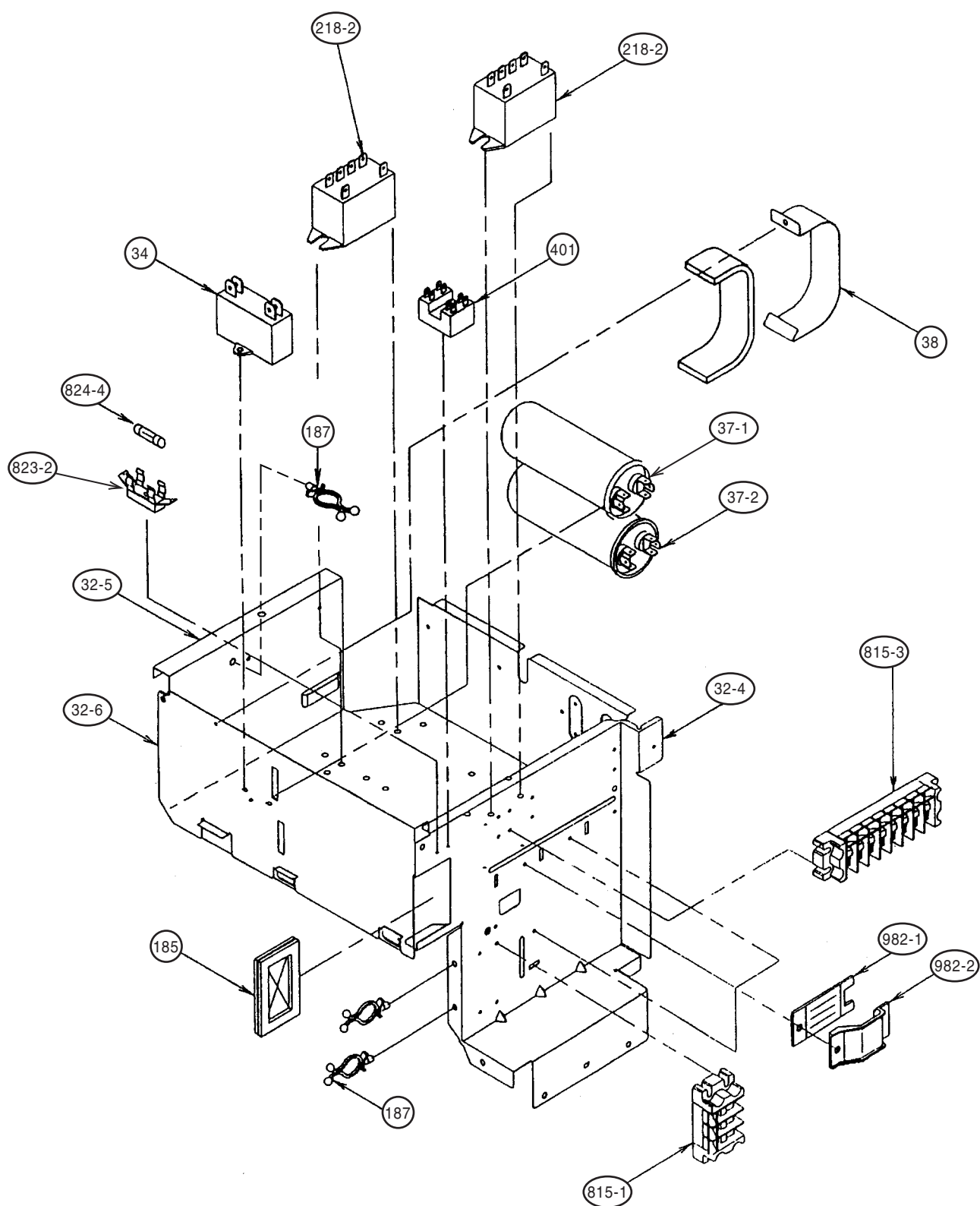
Model : UTG-UDFB-W



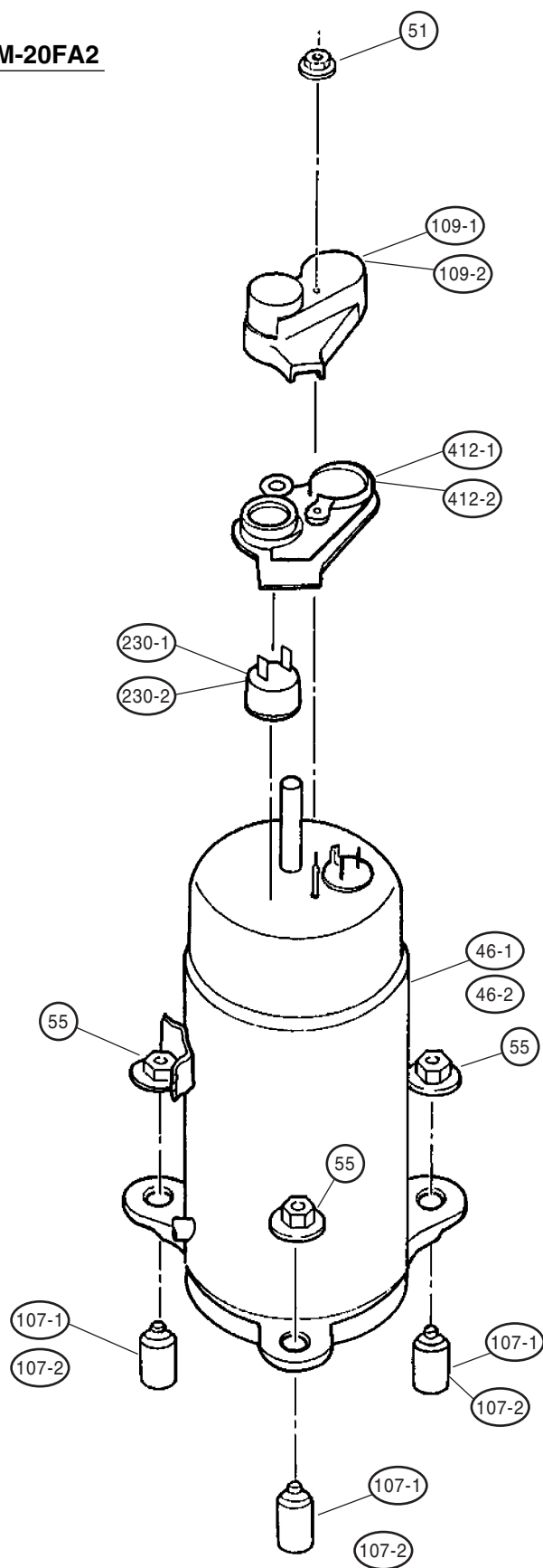




Model : ROM-20FA2



Model : ROM-20FA2



PARTS LIST

INDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		RSM-12FA	RSM-7FA	
28	Blower Cover	-----	9306462000	
63	Front Panel Assy	9312417063	9312417063	
65	Flow Control Panel-Z	9306058043	9306058043	
69	Louver-A	9306055028	9306055028	
74	Filter	9305444014	9305444014	
108	Base	9309755062	9309755062	
109	Casing	9306052027	9306052027	
122	Shaft Holder-B	9303066010	9303066010	
127	Drain Hose Assy	9305550029	9305550029	
146	Evaporator Assy	9373044017	9308559036	
151	Control Box	9330007017	9330007017	
158	Connecting Pipe Assy	9306416010	-----	
164	Fan Motor Assy-IN	9601171010	9601171010	
169	Cross-Flow Fan Assy	9307836015	9307836015	
178	Motor Cushion-M	9601302018	9601302018	
184	Thermistor Spring	313728262708	313728262708	
196	Clamp SKB-150	313035356905	313035356905	
233	Power Transformer	9900028015	9900028015	
236	Controller PCB Assy	9704865052	9704865052	
240	Remote Control Unit	9374322220	9374322220	
281	BRACKET(PIPE)	9330011014	9330011014	
283	Bushing-A	9303529010	9303529010	
323	Louver-B	9306056025	9306056025	
401	Wall Hook Bracket	9304358008	9304358008	
440	Flow Control Panel-U	9306057046	9306057046	
522-1	Gear-A	9306062002	9306062002	
523	Gear Bracket	9306407001	9306407001	
652-1	Thermistor Holder Pipe	313714262805	313714262805	
668	Screw w/Washer	313681304205	313681304205	
759	Intake Grille	9330002029	9330002029	
764	Drain Cap Assy	9304150008	9304150008	
767-1	Bottom Cover	9330004016	9330004016	
777	CLAMPER(GRILL)	9306755010	9306755010	
815	Terminal	9900040055	9900040055	
850	Window (Receiver)	9330003019	9330003019	
872	Indicator Case	9330009011	9330009011	
873	Lamp Cover	9330014015	9330014015	
874	Control Box Cover	9330008014	9330008014	
875	PCB Assy (Power+Indicator)	9704871015	9704871015	
876	Step Motor	9900139018	9900139018	

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. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		RCM-12FA				RCM-12FA	
64	Capacitor (FanMotor)	9704305046		462	Top Cover Plate	9359642015	
67	Rubber (Vibration-proof)	9361279001		464	Body-A	9359643005	
117-3	Special Washer M6	313306391007		465	Body-B	9359645009	
127	Drain Hose	9359659013		467	Drain Port	313005415658	
138	Special Wall-A	9359647003		468	Special Nut-A (Large)	313005446653	
146	Evaporator Assy	9373214014		469	Special Nut-B (Small)	313005446759	
160	Drain Pan	9359651000		470	Separate Wall-B	9359648000	
164	Fan Motor Assy-In	9601040019		474	Turbo Fan	9359658009	
184-1	Thermo. Spring-A	313728262708		475	Cushion(Turbo Fan)	9366013006	
185	Rubber Bushing	313005066051		476-1	Special Nut M8	313005360755	
187	Clamp No. 1219	313361271706		476-2	Special Washer	301801185049	
196	Clamp SKB-150	313035356905		476-3	Special Washer	9359954002	
210	Main Relay	9356781007		478	Sensor M. Bracket	9359654001	
223	Control Box	9359661016		479	Float Switch	313005416154	
234	Thermistor Assy-Room	9703299032		482	Pump Unit	9359974000	
235	Thermistor Assy-Pipe	9703297014		484	Hanger Metal	9359644002	
236	Control PCB Assy (K01AL-040FWSE-C1)	9704557841		488	Drain Pan Plug	9359653004	
240	Remocon Assy	9371190044		495	Clamp No. 2U46	9352715006	
244	Pipe Cover	9359646006		514	Control Box Cover	9359662006	
287	Cap (Power)	9352173011		628	Locking Spacer-B	313005446558	
301	Clamp NK-2N	313985355201		652-1	Thermistor Holder Pipe	313806262805	
313	Hooking Wire	9359983002		743	Remocon Holder	9305642014	
338	Motor Fixture	9359656005		797	Separate Wall-C	9359649007	
381	Locking Spacer	313209391506		798	Pump Hook Bracket	9359650003	
395	Eva Holder	9373179016		815	Terminal-3P	9900203016	
399	Air Duct	9359660002		824-3	Fuse	0600222512	
411	Supporter-A	9359655008		834	Wire Cover	9359878001	
430	Clamp NK-7N	313095365602		835	Cushion-A (For Pump)	9352211003	
457	Drain Pan Support	9359652007		836	Cushion-B (For Pump)	9356084016	
				875	Filter PCB Assy	9704561169	
				965	Flare Nut-B	9351062019	
				989-1	Cord Clamp-A	9359822011	
				989-2	Cord Clamp-B	9359823018	
				990	Distributor Assy	9373034049	

GRILLE ASSY

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		UTG-UDFB-W				UTG-UDFB-W	
93	Filter	9359632009		694	Cam Gear	9359628002	
165	Motor Cover	9359623014		700	Panel	9359619017	
196	Clamp SKB-150	313035356905		705	Louver	9359624011	
226	Motor Gear	9359629009		710	Intake Grille	9360543011	
385	Indicator PCB Assy	9702224011		711-1	Filter Clamp-A	9359634003	
392	Cover-A	9359622017		711-2	Filter Clamp-B	9359635000	
416	Insulation (Panel)-A	9359620006		758	Decoration Plate	9360862013	
417	Insulation (Panel)-B	9359621003		763	Receiver Cover	9359630005	
690	Joint-A	9359626008		776	Grille Stopper	9359633013	
691	Joint-B	9359627005		777	Grille Hook	9359761006	
692	Joint Shaft	9359625001		876-2	Step Motor	9360307019	

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

OUTDOOR UNIT

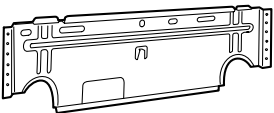
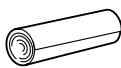
Ref. No.	Description	Part No.	Ord Q'ty
		ROM-20FA2	
2	Fan Cover	9371187013	
4	Emblem	9361328006	
5	Cabinet-A, Painted	9359797043	
6	Cabinet-C, Painted	9359825029	
9	Cabinet-B, Painted	9359824022	
12	Base Assy, Painted	9359813019	
13-1	3-Way Valve	9372205044	
14-2	2-Way Valve	9372204054	
15	Strainer Assy	9366602019	
16	Condenser Assy	9374106073	
26	Compressor Cover-A	9364595009	
29	Separate Wall	9359805014	
32-4	Control Box Metal-D	9361247000	
32-5	Control Box Metal-E	9361248007	
32-6	Control Box Metal-F	9361249004	
34	Capacitor (Fan Motor)	9704305015	
37-1	Running Capacitor	9704436122	
37-2	Running Capacitor	9704436016	
38	Clamp Metal (Capacitor)	9352123009	
39	Propeller Fan	9359837015	
41-2	Fan Motor Induction-Out (MFB-30NTAT)	9601754015	
45-3	Motor Bracket-A	9369627002	
45-4	Motor Bracket-B	9371439013	
45-6	Motor Bracket-D	9369630002	
45-7	Motor Bracket center da	9373076018	
46-1	Compressor Assy (802 354 35B)	9373010036	
46-2	Compressor Assy (802 100 65B)	9373010012	
51	Special Nut (For Comp.)	313199233602	
55	Special Nut M8 (For Comp.)	9355091008	
64	Cabinet-Left, Painted	9359840046	

Ref. No.	Description	Part No.	Ord Q'ty
		ROM-20FA2	
84	Valve Cover	9359834014	
85	Valve Plate Assy, Painted	9361251021	
107-1	Rubber Seat (For Comp.) A (UNIT A)	9351813017	
107-2	Rubber Seat (For Comp.) A (UNIT B)	9351507015	
109-1	Terminal Cover (Comp.) (UNIT A)	9351120009	
109-2	Terminal Cover (Comp.) (UNIT B)	9302419008	
117-3	Hex. Nut	301721180114	
149	Water Seal Plate	9359841029	
185	Rubber Bushing	313005066051	
187	Clamp No. 1219	313361271706	
218-2	Relay	9900239015	
230-1	Ocr Assy (MRA99908-9201) (UNIT A)	9312899005	
230-2	Ocr Assy (MRA99170-9201) (UNIT B)	9309128002	
328	Compressor Plate Assy	9359830023	
401	Terminal-2P	9701971015	
412-1	Terminal Gasket (comp) (UNIT A)	9351121006	
412-2	Terminal Gasket (comp) (UNIT B)	9351505011	
477	Bellmouth	9359809012	
527	Protective Net	9359845010	
734	Top Plate, Painted	9359799023	
812	Grip	9352157004	
815-1	Terminal-3P	9358660027	
815-3	Terminal-8P	9358660119	
823-2	Fuse Holder	0501456016	
824-4	Fuse (5A-250V)	0600285234	
827	Capillary Tube-A Assy	9360814159	
828	Capillary Tube-B Assy	9360815156	
982-1	Cord Clamp	9356857009	
982-2	Cord Clamp-B	9356858006	

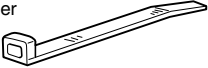
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STANDARD ACCESSORIES

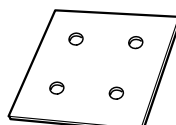
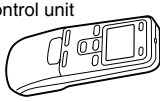
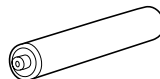
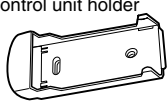
INDOOR UNIT ACCESSORIES (Wall Mounted type)

Name and Shape	Q'ty	Part No.
Wall hook bracket 	1	9304358008
Wall cap-B 	1	313714296205
Remote control unit 	1	9374322220
Battery (penlight) 	1 set	0600185534
Remote control unit holder 	1	9305642014
Cloth tape 	1	9308117007
Tapping screw (big) (ø 4 x 25) 	8	0700076046
Tapping screw (small) (ø 3 x 12) 	2	0700019036

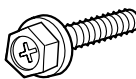
OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Part No.
Binder 	2	312300787605
Putty 	1	303020200114
Hexagon wrench 	1	9351228019

INDOOR UNIT ACCESSORIES (Cassette type)

Name and Shape	Application	Part No.
Coupler heat insulation 	For indoor side pipe joint	9350716029
		9352766015
Special nut A (large flange) 	For installing indoor unit	313005446653
Special nut B (small flange) 	For installing indoor unit	313005446759
Template 	For ceiling hole cutting	9360256003
Remote control unit 	Use for air conditioner operation	9371190044 (AR-JW4)
Battery (penlight) 	For remote control unit	0600185534
Remote control unit holder 	For mounting the remote control unit	9305642014
Tapping screw (ø 3 x 12) 	For remote control unit holder installation	301141533125

GRILLE ASSY ACCESSORIES

Name and Shape	Application	Part No.
Bolt 	For opening the refrigerant valve on the outdoor unit	0700139116
Washer 	For mounting grille	301801155020
Blower cover insulation 	For discharged air	9360047007

