

# SERVICE MANUAL

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**SPLIT TYPE  
AIR CONDITIONER (50Hz)  
DUCT type**

Models

Indoor unit

Outdoor unit

**ARG30TLAA**

**AOG30TMBDL**

**ARY30TLAA**

**AOY30TMBDL**



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# SPECIFICATIONS

TYPE	COOLING & HEATING	
INDOOR UNIT	ARG30TLAA ARY30TLAA	
OUTDOOR UNIT	AOG30TMBDL AOY30TMBDL	
COOLING CAPACITY (kW)	8.50	
HEATING CAPACITY (kW)	9.40	

POWER SOURCE	(V)	230
	(Hz)	50
RUNNING CURRENT (A)	(COOL)	16.0
	(HEAT)	15.0
INPUT WATTS (kW)	(COOL)	3.50
	(HEAT)	3.35
E.E.R (kW/kW)	(COOL)	2.43
	(HEAT)	2.81
STARTING CURRENT (A)	93	
MOISTURE REMOVAL (l/h)	4.0	

COMPRESSOR TYPE	Hermetic type, 2 pole, Single phase, Induction motor, Rotary	
DISCRIMINATION	NE52VNHMT	
REFRIGERANT R407C (g)	2700	

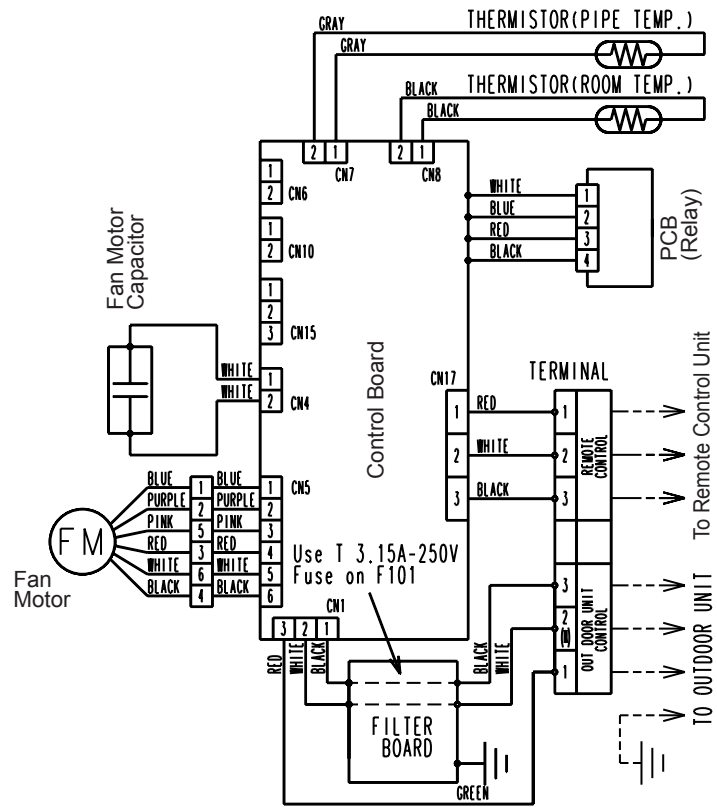
FAN SPEED INDOOR (r.p.m)	HIGH	1240
	MED	1140
	LOW	1040
FAN SPEED OUTDOOR (r.p.m)	760	
AIR FLOW (m3/h)	INDOOR	1750 (at 100Pa)
	OUTDOOR	3320
DIMENSIONS (mm)	INDOOR	270 x 1210 x 700
	OUTDOOR	900 x 900 x 350
WEIGHT (kg)	INDOOR	43 / 58
	OUTDOOR	80 / 92
MAX PIPE LENGTH / HEIGHT (m)	30 / 15	
REMOTE CONTROLLER TYPE	WEEKLY	

## REFRIGERANT CHARGE (R407C)

FULL CHARGE AMOUNT	PIPE LENGTH	7.5m (25ft)	2700g (95.2 oz)
		10m (33ft)	2825g (100.5 oz)
		15m (49ft)	3075g (108.5 oz)
		20m (66ft)	3325g (117.3 oz)
		25m (82ft)	3575g (126.1 oz)
ADDITIONAL REFRIGERANT			50g/m (0.54 oz/ft)

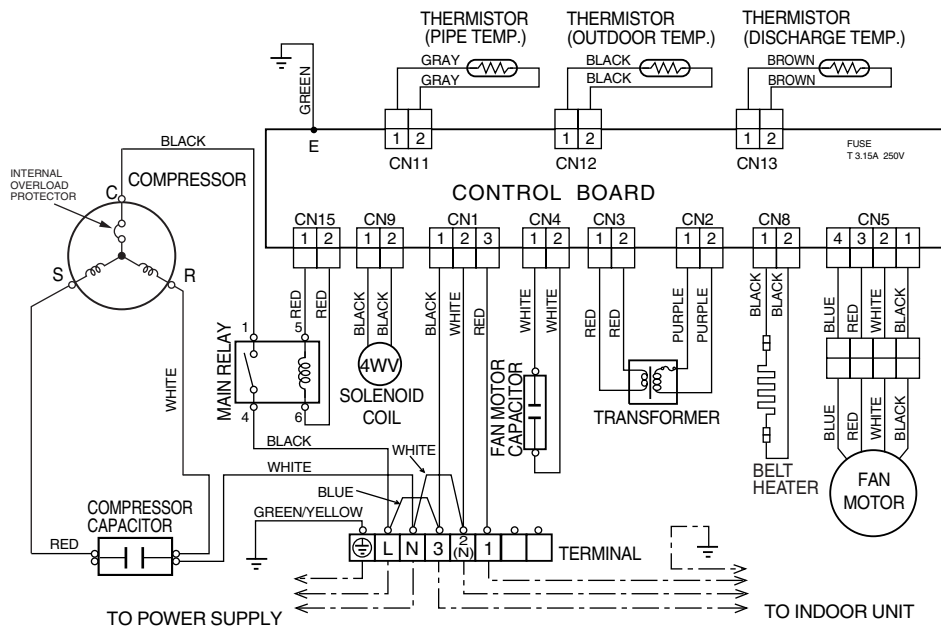


# CIRCUIT DIAGRAM

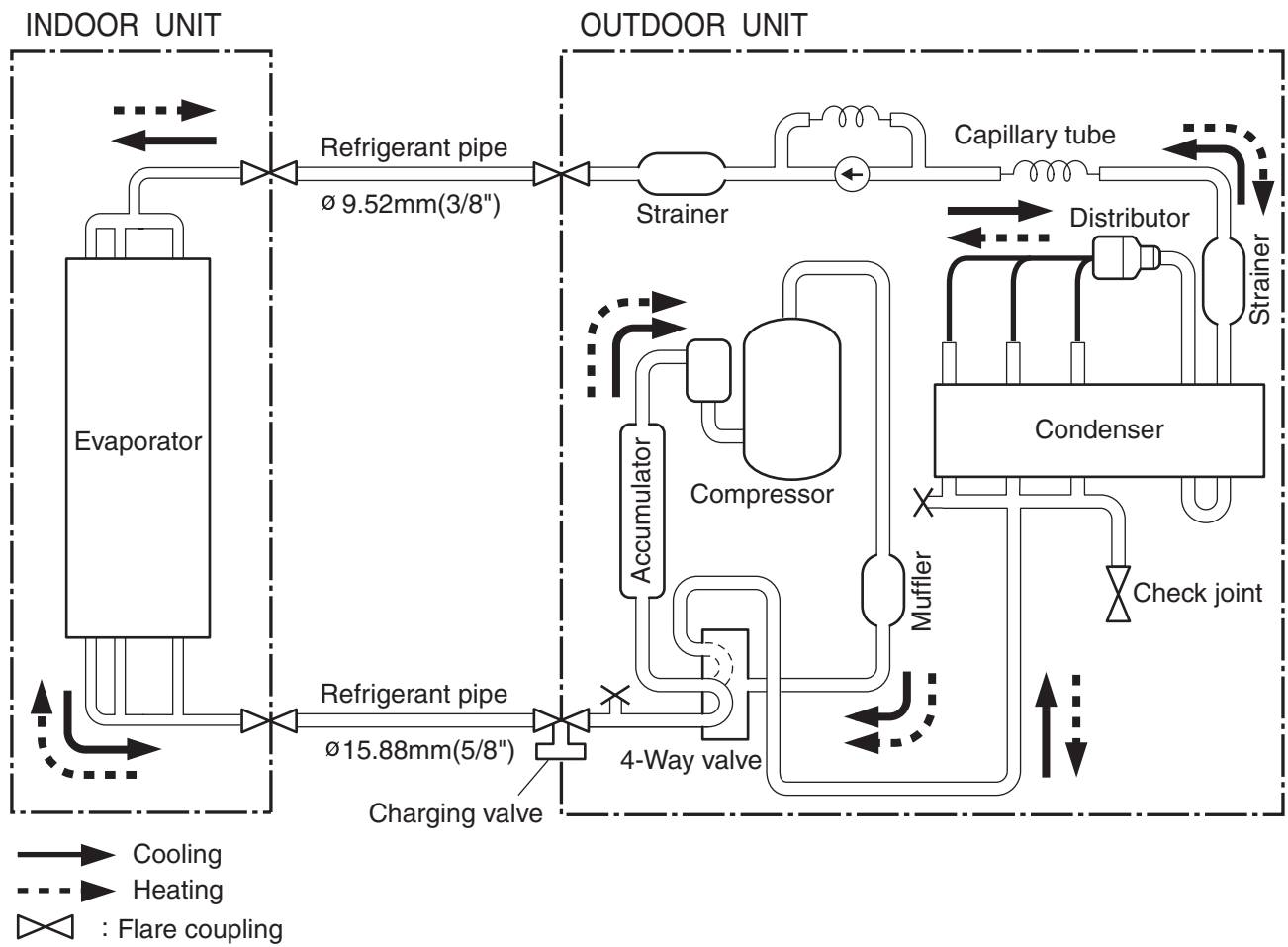


INDOOR UNIT

OUTDOOR UNIT



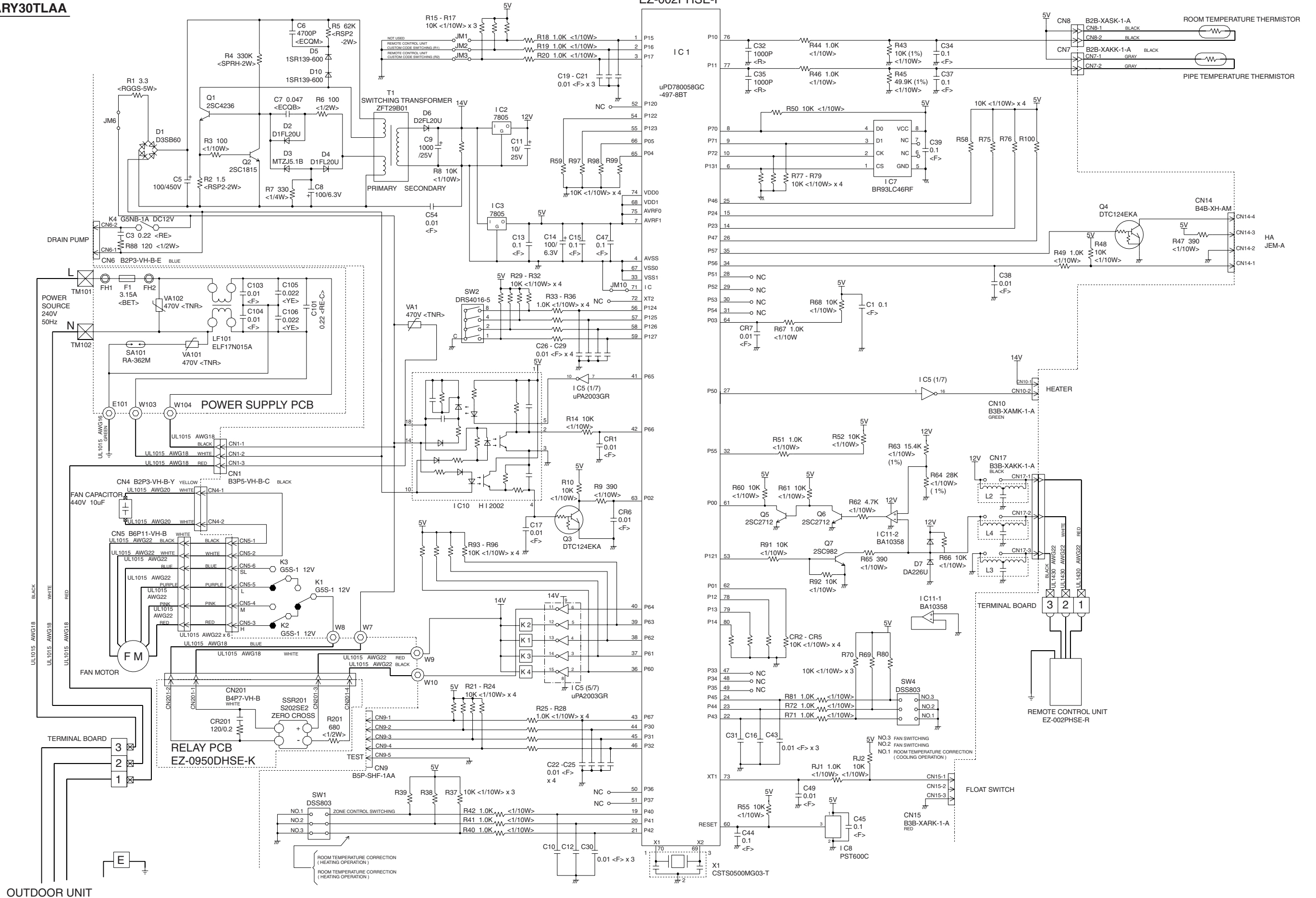
# REFRIGERANT SYSTEM DIAGRAM



# INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Models :ARG30TLAA  
ARY30TLAA

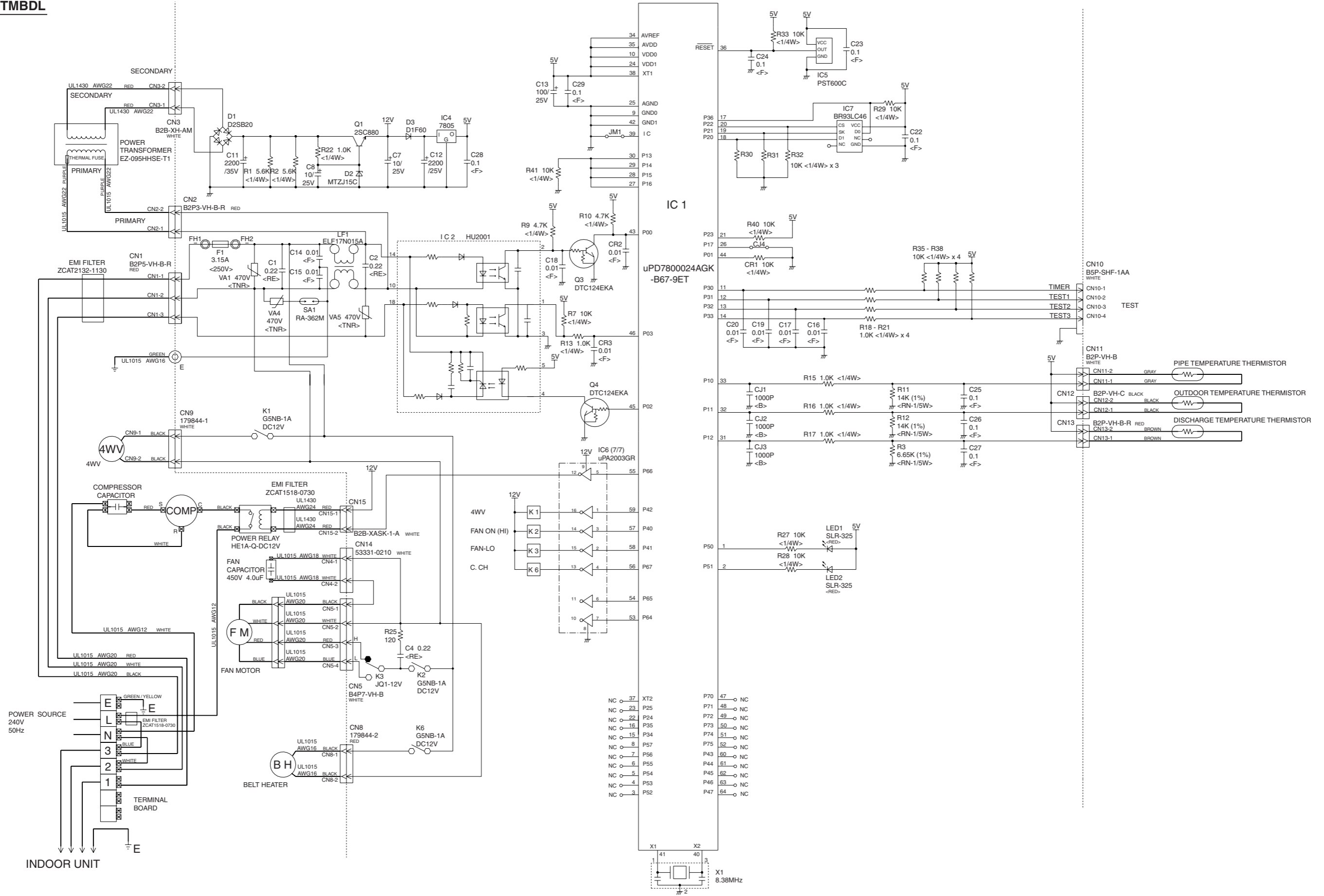
## CONTROLLER PCB ASSEMBLY ( MAIN PCB ) EZ-002PHSE-F



# OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Models : AOG30TMBDL  
AOY30TMBDL

## CONTROLLER PCB ASSEMBLY ( MAIN PCB ) EZ-0028HUE-C



# ERROR CONTENTS

## 1. REMOTE CONTROLLER

- When EE : EE blinks at the current time display, there is an error inside the air conditioner. If the SET TIME button (▼) and TEMP./DAY button (▼) are pressed simultaneously for more than three seconds, the self diagnosis check will start and the error contents will be displayed at the current time display. When the operation lamp lights, press the START/STOP button and after operation lamp goes off, perform the same operation. Process the error contents by referring to (Table 1).

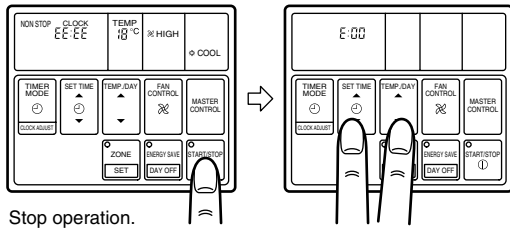


Table 1

Error cord	Error contents
E:00	Communication error (indoor unit ↔ remote controller)
E:01	Communication error (indoor unit ↔ outdoor unit)
E:02	Room temperature sensor open
E:03	Room temperature sensor shortcircuited
E:04	Indoor heat exchanger temperature sensor open
E:05	Indoor heat exchanger temperature sensor shortcircuited
E:06	Outdoor heat exchanger temperature sensor open
E:07	Outdoor heat exchanger temperature sensor shortcircuited
E:08	Power source connection error
E:09	Float switch operated
E:0A	Outdoor temperature sensor open
E:0B	Outdoor temperature sensor shortcircuited
E:0C	Discharge pipe temperature sensor open
E:0d	Discharge pipe temperature sensor shortcircuited
E:0E	Outdoor high pressure abnormal
E:0F	Discharge pipe temperature abnormal
E:11	Model abnormal
E:12	Indoor fan abnormal
E:13	Outdoor signal abnormal
E:14	Outdoor EEPROM abnormal

- To stop test running, press the START/STOP button.
- For the operation method, refer to the operating manual and perform operation check.
- Check that there are no abnormal sounds or vibration sounds during test running.

## 2. OUTDOOR UNIT

### ERROR : Heat & Cool model (Reverse cycle) only

The LED lamps operate as follows (Table 2) according to the error contents.

Table 2

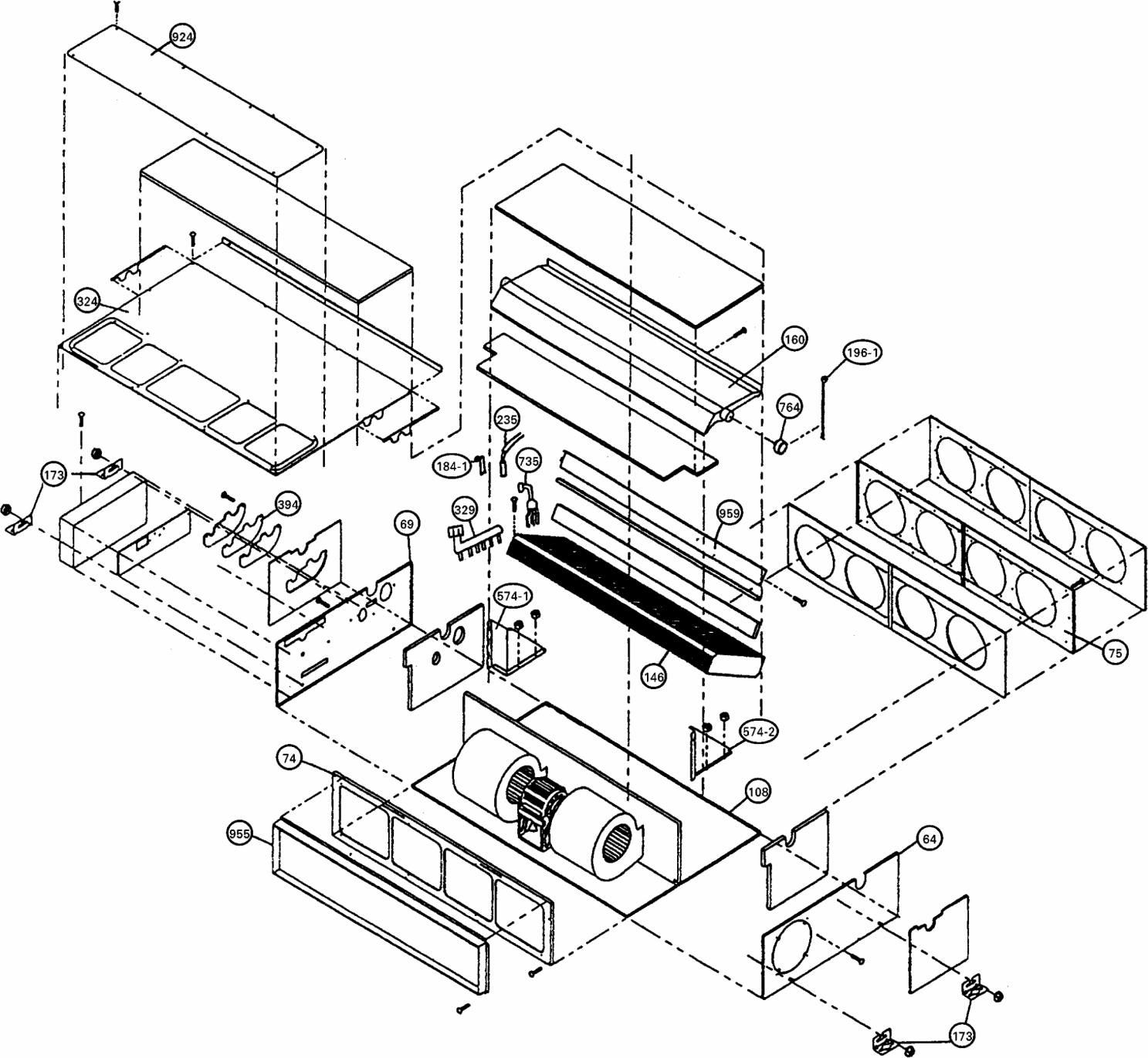
Error display		Error contents
LED 1	LED 2	
<p>Quick flash continued</p>	<p>Quick flash continued</p>	Model abnormal or EEPROM abnormal
<p>1 quick flash repeated</p>	<p>Lighting continued</p>	Power source connection error
<p>2 quick flashes repeated</p>	<p>Lighting continued</p>	Discharge temperature sensor error
<p>3 quick flashes repeated</p>	<p>Lighting continued</p>	Outdoor heat exchanger temperature sensor error
<p>4 quick flashes repeated</p>	<p>Lighting continued</p>	Outdoor temperature sensor error
<p>5 quick flashes repeated</p>	<p>Lighting continued</p>	Communication signal error
<p>6 quick flashes repeated</p>	<p>Lighting continued</p>	Indoor unit error
<p>7 quick flashes repeated</p>	<p>Lighting continued</p>	Discharge temperature abnormal
<p>8 quick flashes repeated</p>	<p>Lighting continued</p>	High pressure abnormal

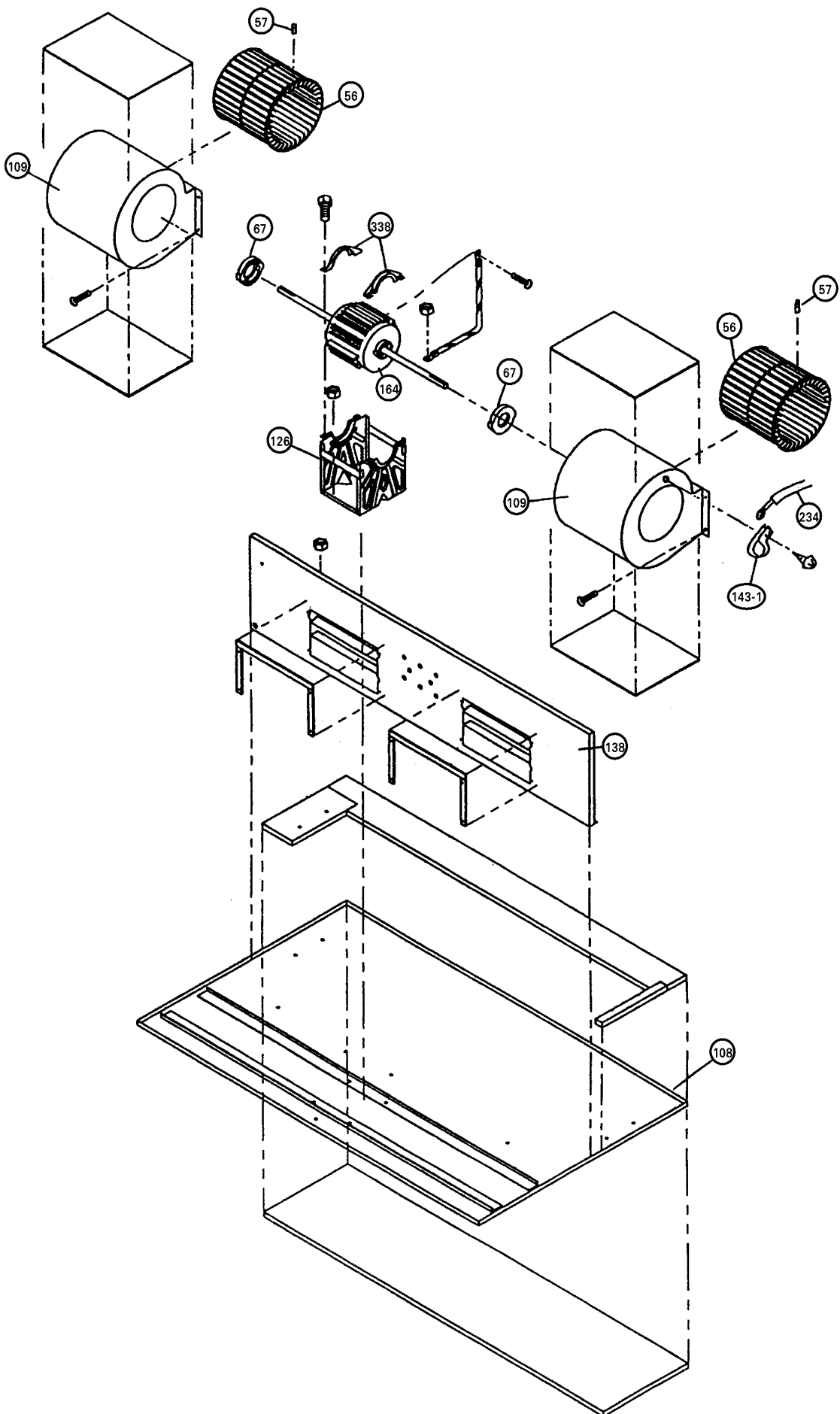
When the fault is cleared, the LED lamp goes off. However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

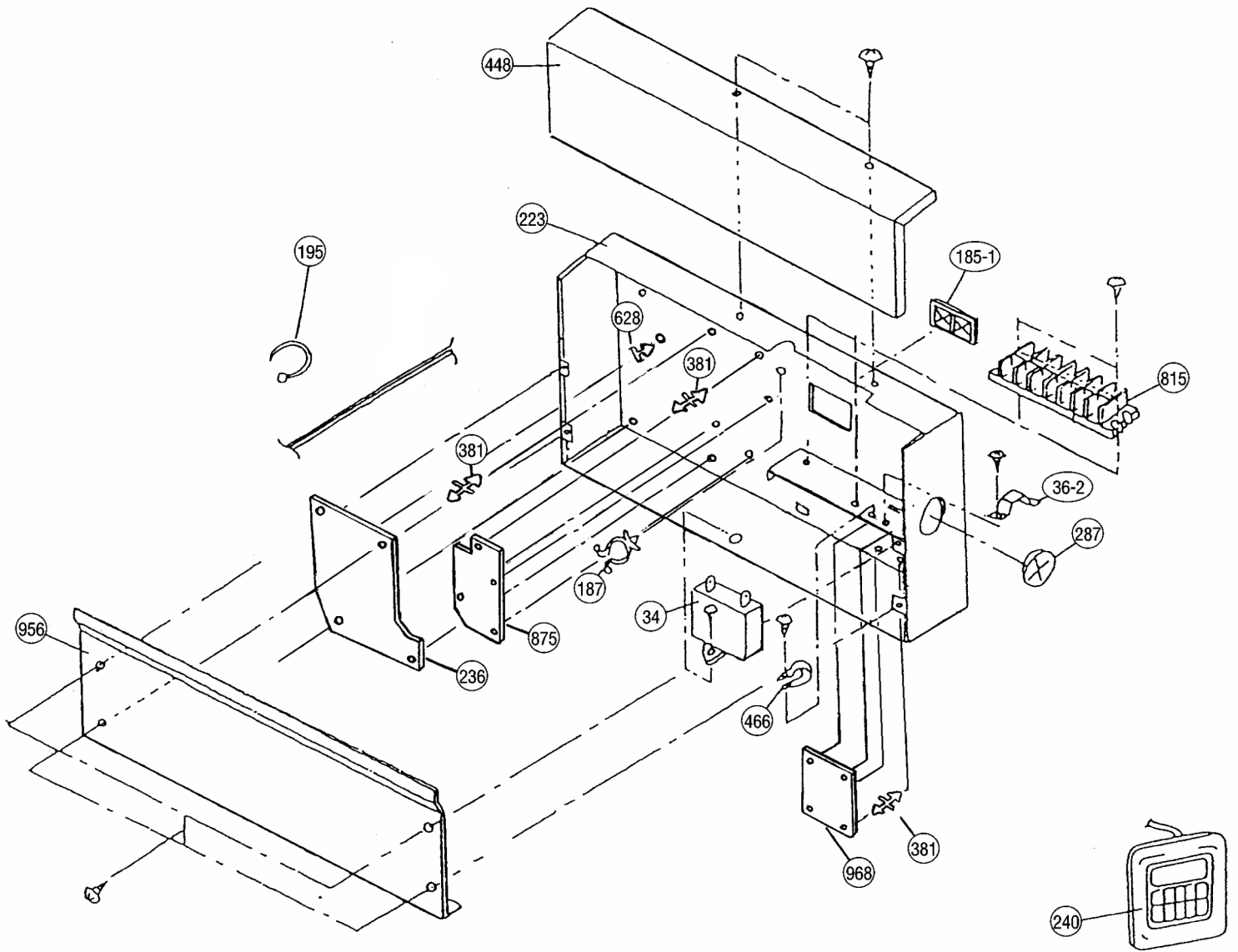


# DISASSEMBLY ILLUSTRATION

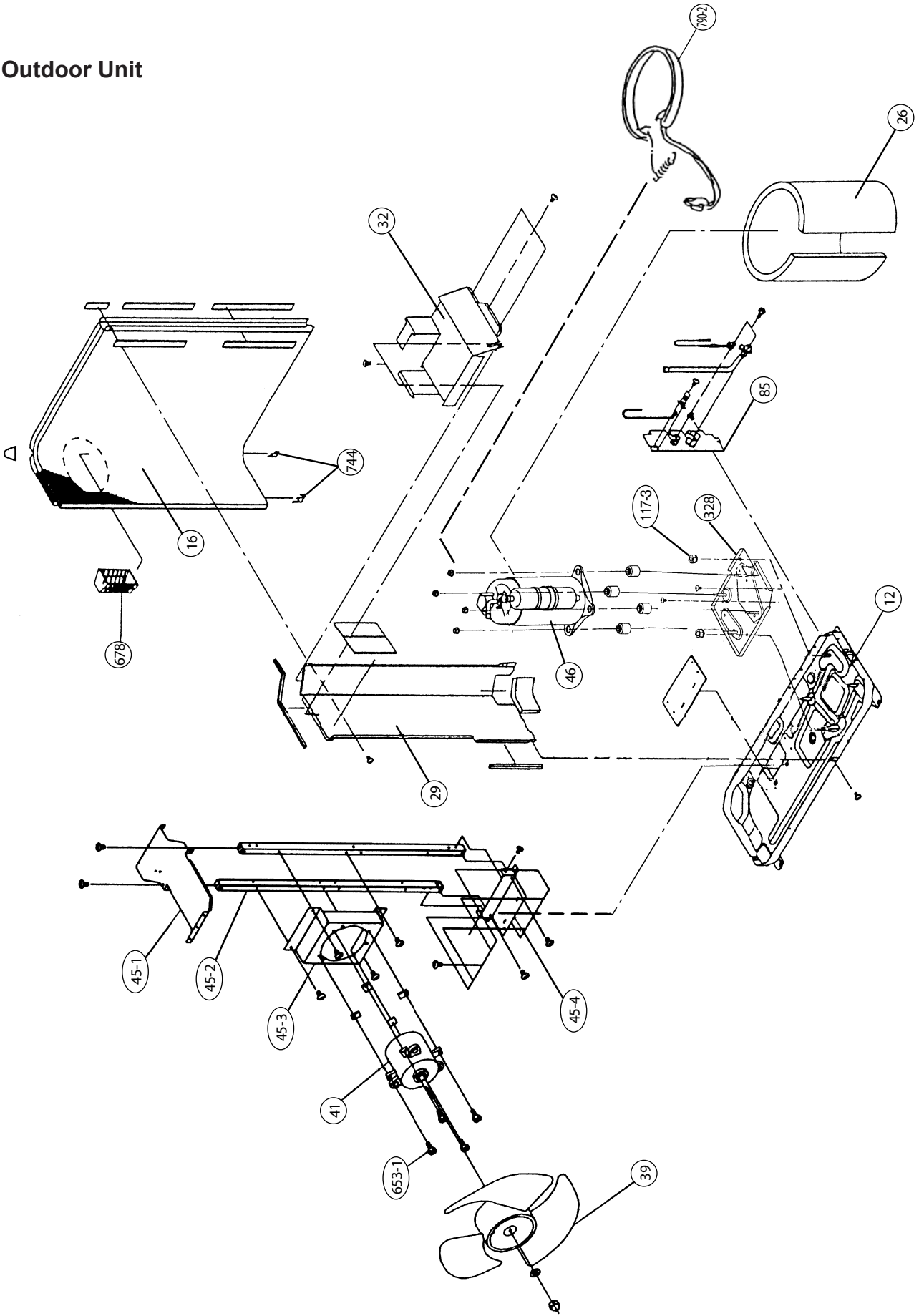
## Indoor Unit

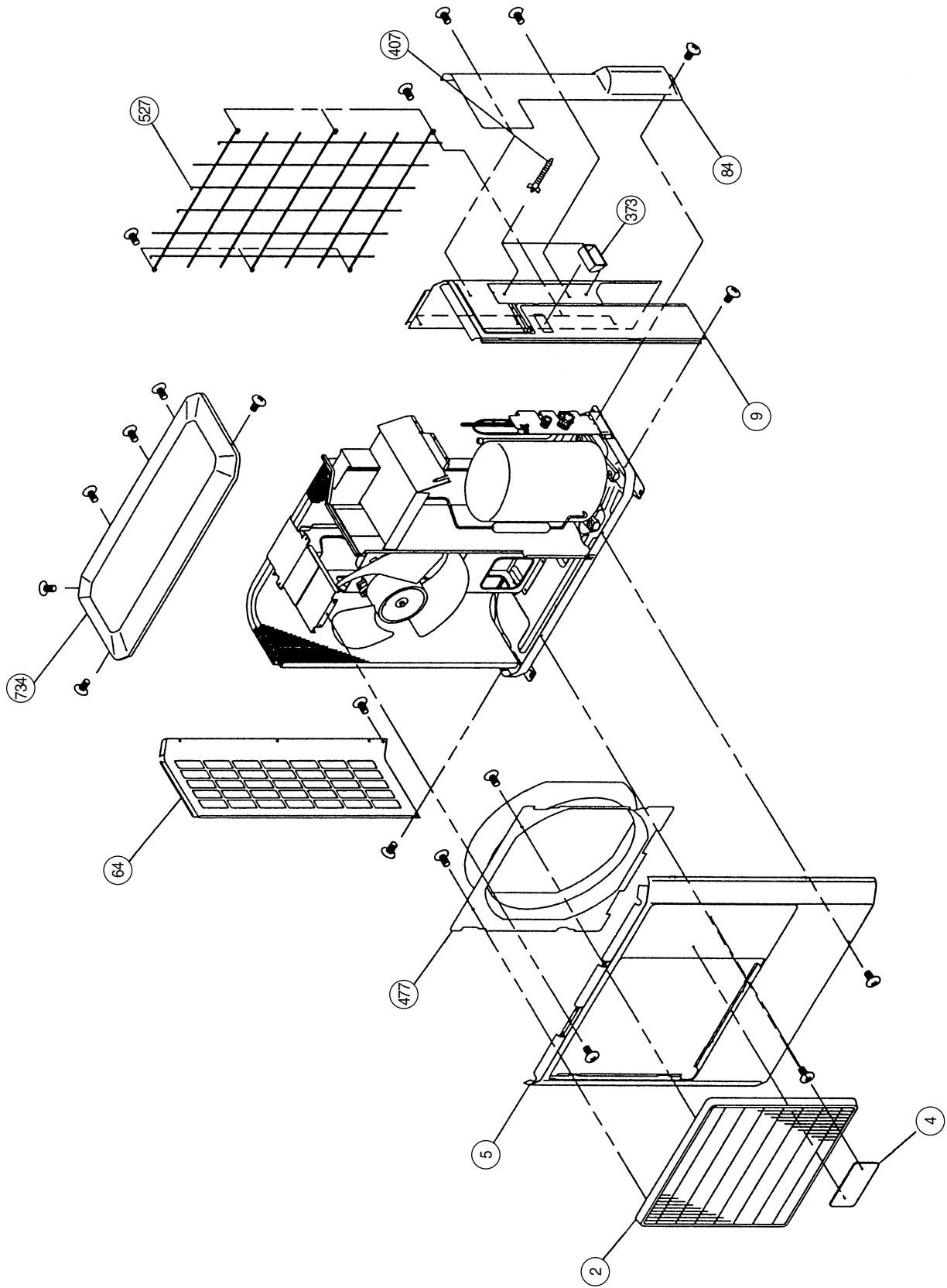


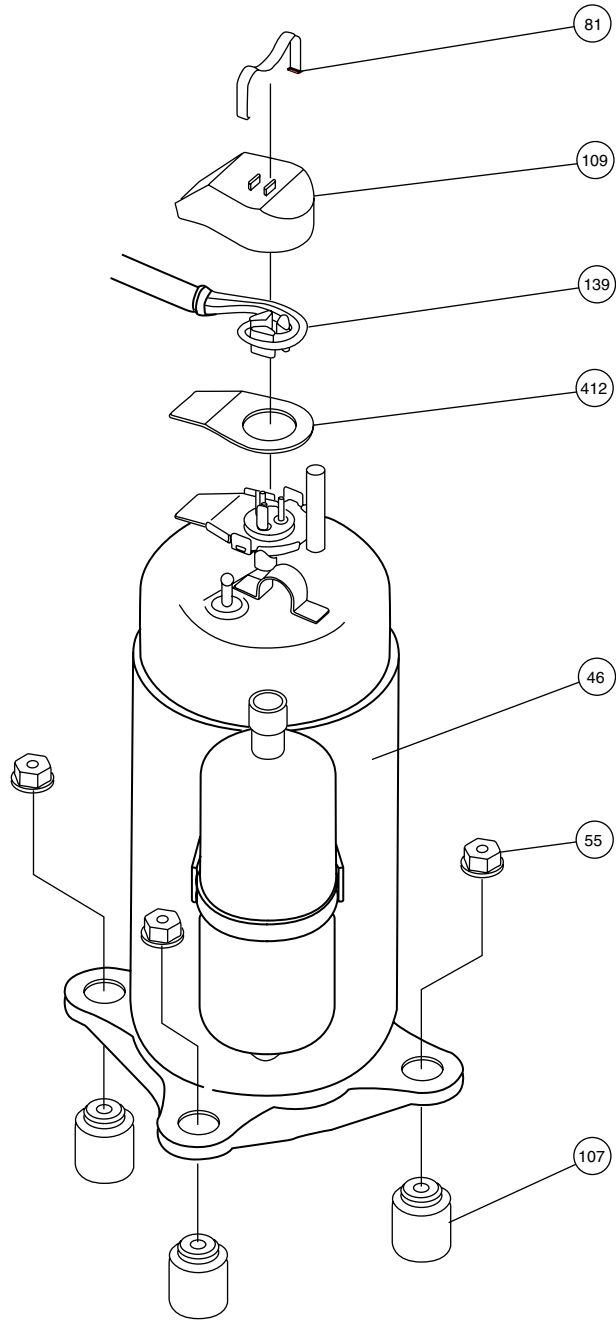


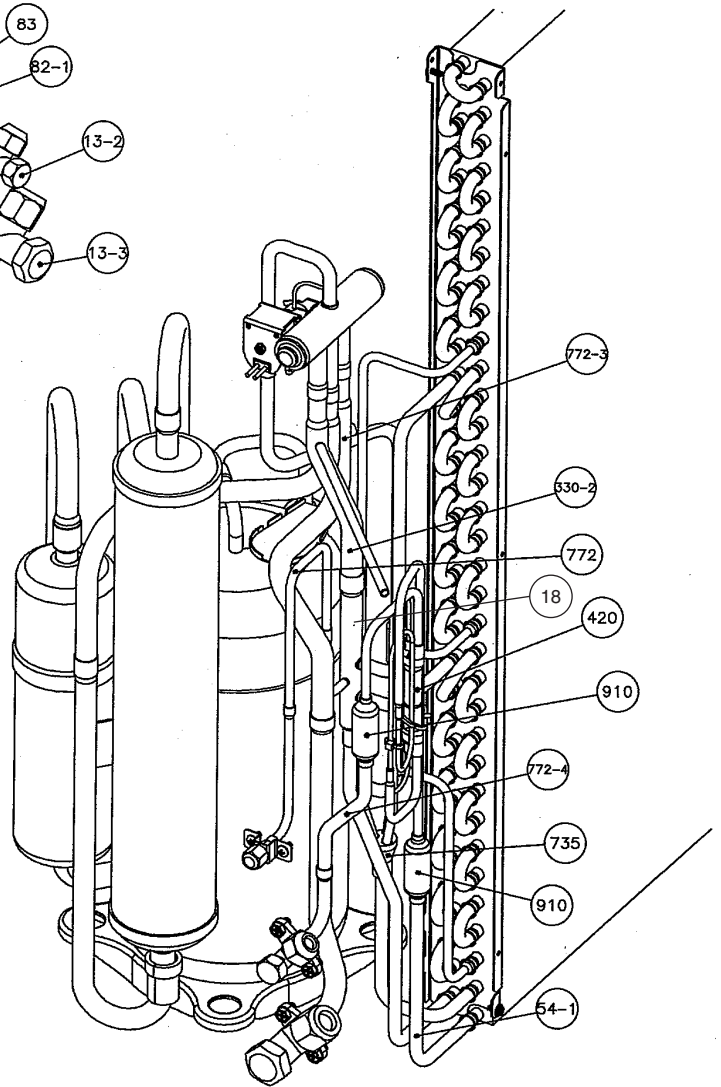
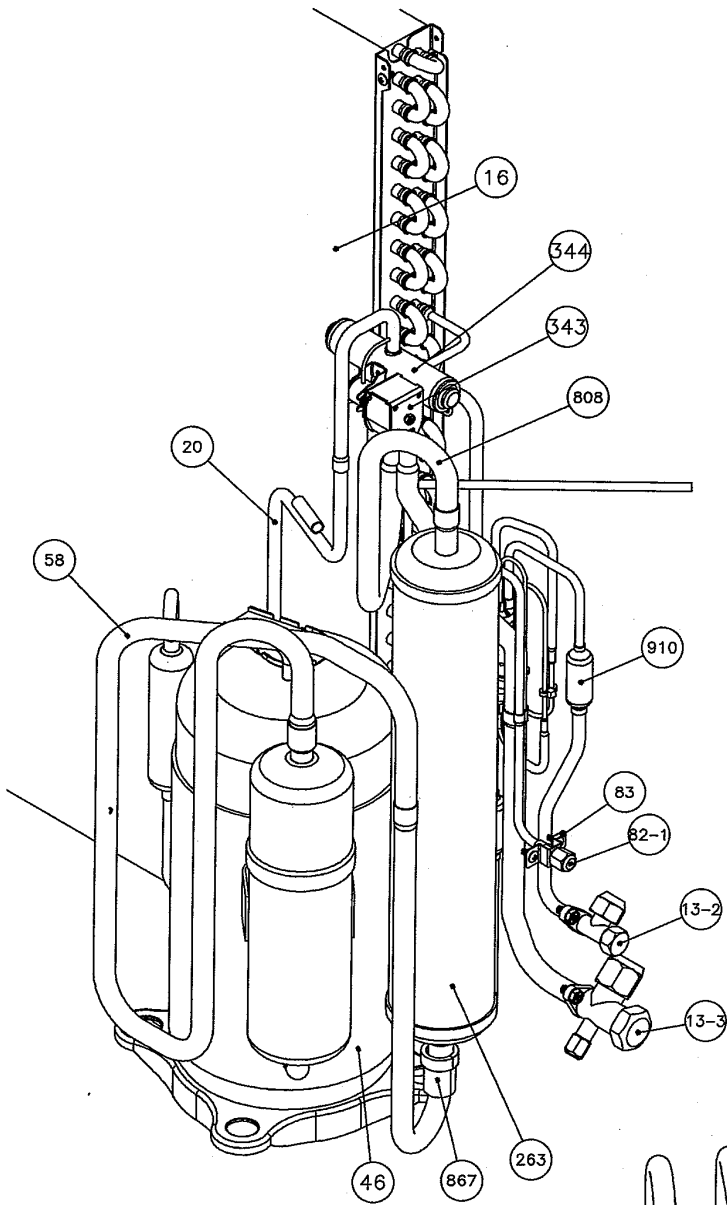


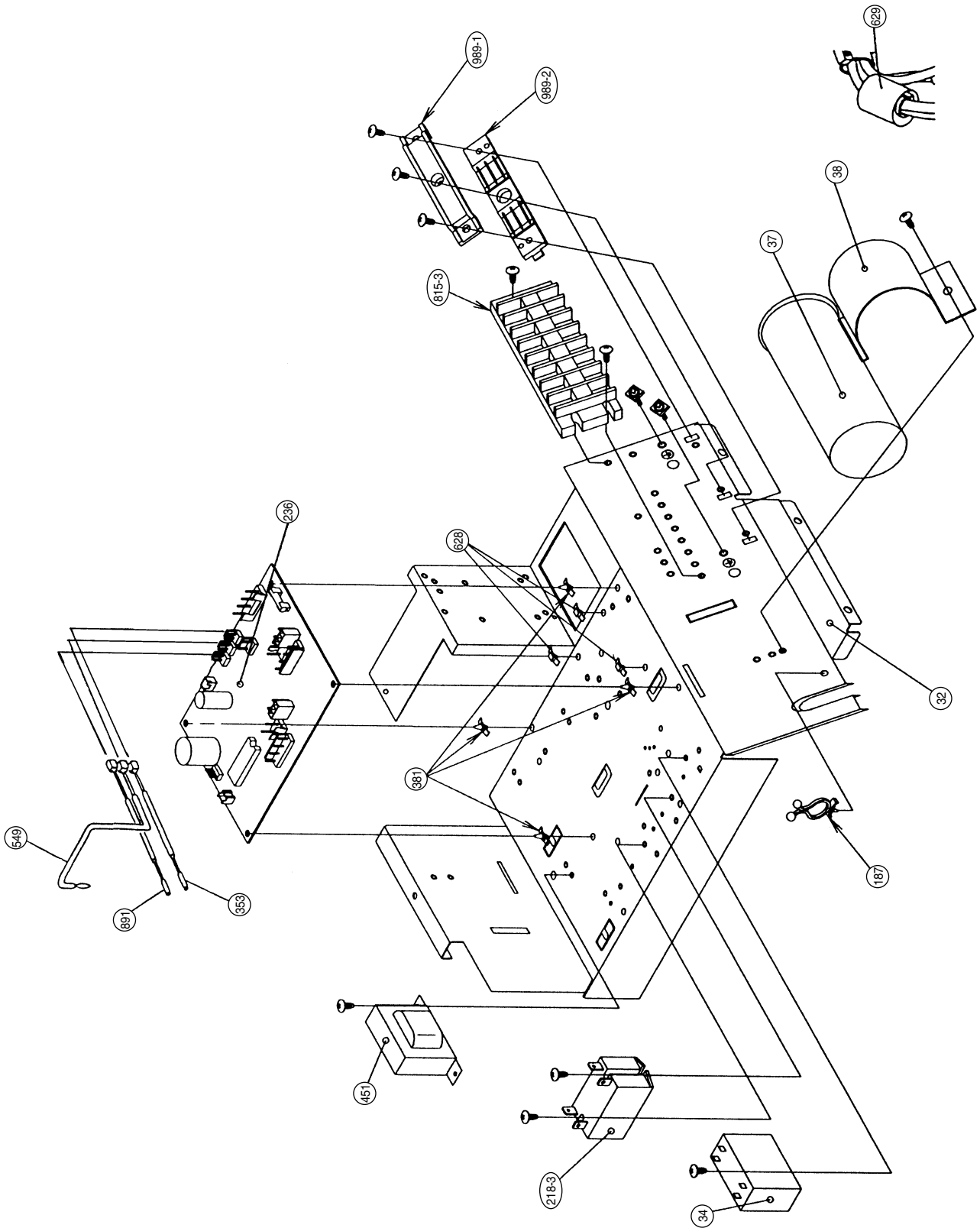
# Outdoor Unit













# 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. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		ARG30TLAA	ARY30TLAA				ARG30TLAA	ARY30TLAA	
34	Capacitor (Fan Motor)	9704305053			223	Control Box Metal Assy	9356558005		
36-2	Cord Holder Metal	9356362008			234	Thermistor Assy	9703299056		
56	Sirocco Fan Assy	9356531022			235	Thermistor Assy-Pipe	9703297045		
57	Hex. Socket Screw	313616213202			236	Controller PCB Assy	9704557049		
64	Cabinet-Left Metal	9356551006			240	Remote Control Unit	9371438030		
67	Rubber (Vibration-proof)	313659068604			287	Cap (Power)	9352173011		
69	Cabinet-Right Metal	9356547009			324	Top Plate	9356546002		
74	Intake Panel	9356537000			329	Coupling Pipe Assy	9369117008		
75	Outlet Panel Assy	9356538007			338	Motor Fixture	9356536003		
108	Base Assy	9356518009			381	Loking Spacer	313209391506		
109	Casing Assy	9356527001			394	Pipe Fixing Plate	9356554007		
126	Motor Fixing Table Assy	9356533002			448	Control Box Metal-B	9356560008		
138	Separate Wall	9356523003			466	Clamp NK-4N	313714328805		
143-1	Clamp NK-3N	313361274700			574-1	Eva. Fixing Plate-R	9356521009		
146	Evaporator Assy	9369111006			574-2	Eva. Fixing Plate-L	9356522006		
160	Drain Pan Assy	9356542028			628	Locking Spacer-B	313005446558		
164	Fan Motor Assy	9600830017			735	Distributor Assy	9369112003		
173	Hanger Bracket	9356563009			764	Drain Cap	9356541007		
184-1	Thermo. Spring-A	313728262708			815	Terminal-7P	9703403019		
185-1	Rubber Bushing	9357376004			875	Power PWB Assy	9704561046		
187	Clamp No. 1219	313361271706			924	Intake seal plate	9356553000		
195	Clamp SKB-100	313361275805			955	Square Frange Assy	9356555004		
196-1	Clamp SKB-3M	312300787605			956	Controll Box Metal-E	9356900002		
					959	Eva. Seal Plate	9356540000		
					968	Relay PCB Assy	9701594030		







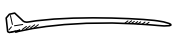

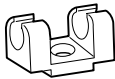



**OUTDOOR UNIT**

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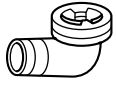


Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		AOG30TMBDL	AOY30TMBDL				AOG30TMBDL	AOY30TMBDL	
2	Fan Cover (Guard)	9371187013			187	Clamp No. 1219	313361271706		
4	Emblem-Rear "FUJITSU"	9371388014			218-3	Power Relay	9900074029		
4	Emblem-Rear "GENERAL"	313791088308			236	Controller PCB Assy	9704299024		
5	Cabinet-A, Painted	9359797029			263	Accumulator	9370703009		
9	Cabinet-B, Painted	9359798026			328	Comp Plate Assy	9362273046		
12	Base Assy, Painted	9359813019			330-2	Inlet Pipe (Condenser)-B Assy	9369074004		
13-2	2-Way Valve (3/8)	9362380003			343	Solenoid	9704061027		
13-3	3-Way Valve (5/8)	9366193005			344	4-Way Valve	9307556012		
16	Condenser Assy	9369981005			353	THERMISTOR(Heat Exchanger)	9900043025		
18	Inlet Pipe (Condenser) Assy	9369068003			373	Grip	9352157004		
20	Discharge Pipe Assy	9371581088			381	Looking Spacer	313209391043		
26	Comp. Cover	9369093005			407	Clamp (Cable) No. 1259	313739340109		
29	Separate Wall	9359804017			412	Terminal Gasket	9362370004		
32	Control Box Metal	9359839019			420	Capillary Assy	9371287133		
34	Capacitor (Fan Motor)	9704305015			451	Transformer	9900039011		
37	Running Capacitor	9703107023			477	Bell-Mouth	9359809012		
38	Capacitor Clamp	9360610010			527	Protection Net	9359844013		
39	Propeller Fan Assy	9359837015			549	THERMISTOR(OUT TEMP)	9900037017		
41	Fan Motor Assy-Out	9601754015			628	Spacer	0600118075		
45-1	Motor Bracket-A	9369627002			629	EMI Filter	0400056119		
45-2	Motor Bracket-B	9369628009			653-1	Cup Screw	9385089020		
45-3	Motor Bracket-C	9369629006			678	Bracket (Thermistor)	313557406106		
45-4	Motor Bracket-D	9369630002			734	Cabinet Top Panel	9359799023		
46	Compressor Assy	9372023013			735	Distributor Assy	9369964008		
54-1	Condensing Pipe-A	9372024010			744	Clamp (Condenser)	313166374106		
55	Special Nut M8	9355091008			772	Joint Pipe-A	9369084003		
58	Suction Pipe Assy	9369064005			772-3	Joint Pipe (Valve)	9369082009		
64	Cabinet Left, Painted	9359840022			772-4	Joint Pipe (Valve)-B	9369083006		
81	Strap	9362371001			790-2	Belt Heater A	9361140066		
82-1	Check Joint	9369980008			808	Inlet Pipe (Accumulator)	9370742008		
83	Check Joint Bracket	9359807018			815-3	Terminal-8P	9358660119		
84	Valve Cover	9359817017			867	Accumulator Holder Rubber	9354022010		
85	Valve Fixing Plate	9359806011			891	THERMISTOR (Discharge)	9900038014		
107	Rubber Mount	9362368001			910	Strainer	9369287008		
109	Terminal Cover	9362369008			989-1	Cord Clamp-A	9359822011		
117-3	Hex. Nut w/Sp. Washer	301721180114			989-2	Cord Clamp-B	9359823018		
139	Wire Assy (Compressor)	9370945058							

# STANDARD ACCESSORIES

## INDOOR UNIT ACCESSORIES

Name and Shape	Q`ty	Application	Parts No.
Installation template 	1	For positioning the indoor unit	9357036007
Hanger 	4	For suspending the indoor unit from ceiling	9356563009
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling	313005446653
Special nut B (small flange) 	4		313005446759
Coupler heat insulation (large) 	2	For indoor side pipe joint (large pipe)	9350716029
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)	9352766015
Nylon fastener 	1	For fixing the drain hose	312300787605
Remote control unit 	1		9371438030
Remote control unit cord clamp 	10	For installing the remote control unit cord	313714181904
Tapping screw (flush heads) 	10	For installing the remote control unit cord clamp	301141153027
Auxiliary pipe assembly 	1	For wiring conduit (gas side) connection	9356995022
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection	313806217708

**OUTDOOR UNIT ACCESSORIES**

Name and Shape	Q'ty	Application	Parts No.
Hexagon wrench 	1	For opening the refrigerant valve on the outdoor unit	9351228019
Cable clip 	2	For power cord binding	313739340109
Drain pipe 	1	For outdoor unit drain piping work [Heat & Cool (Reverse cycle) model only]	9303029015
Drain cap 	2		313166024302
Tapping screw 	2	For cabinet A and cabinet D mounting (1) Spare (1)	301463040100

