

SPLIT TYPE ROOM AIR CONDITIONER

WALL MOUNTED type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	ASY20AGD-W	AOY20AZA
	ASY20RGD-W	AOY20RZDL
	ASY24AGD-W	AOY24ABA
	ASY24RGD-W	AOY24RZDL

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SPECIFICATIONS

TYPE		COOL	COOL & HEAT	COOL	COOL & HEAT
INDOOR UNIT		ASY20AGD-W	ASY20RGD-W	ASY24AGD-W	ASY24RGD-W
OUTDOOR UNIT		AOY20AZA	AOY20RZDL	AOY24ABA	AOY24RZDL
COOLING CAPACITY	(kW)	5.55 - 5.70	5.55 - 5.70	6.75 - 6.85	6.70 - 6.80
HEATING CAPACITY	(kW)	—	5.65 - 5.80	—	7.60 - 7.70

ELECTRICAL DATA

POWER SOURCE	(V)	220 - 240				
FREQUENCY	(Hz)	50				
RUNNING CURRENT	(A)	COOLING	9.9 - 9.3	9.9 - 9.3	12.0 - 12.4	12.2 - 12.6
		HEATING	—	8.5 - 8.0	—	11.5 - 12.0
INPUT WATTS	(kW)	COOLING	2.1 - 2.2	2.1 - 2.2	2.52 - 2.64	2.57 - 2.67
		HEATING	—	1.8 - 1.9	—	2.41 - 2.50
EER	(kW/kW)	COOLING	2.64 - 2.59	2.64 - 2.59	2.68 - 2.59	2.61 - 2.55
		HEATING	—	3.14 - 3.05	—	3.15 - 3.08
MOISTURE REMOVAL	(ℓ/hr)	2.0		2.8		
AIR CIRCULATION-Hi	(m ³ /hr)	840		1,000		

COMPRESSOR

TYPE	Hermetic type,Permanent split condenser,2pole,Single phase,Induction motor				
CODE	AWG5524EXC	AWG5524EXC	H23B30QABKA	AWG5532EXC	
REFRIGERANT	R-22 (g)	1,320	1,800	2,000	2,070

FAN MOTOR

POWER SOURCE	(V)	220 - 240			
INDOOR UNIT	TYPE	MFA - 20CTH		MFA - 24CTH	
	HI-SPEED (r.p.m.)	1,060 - 1,110		1,220 - 1,290	
	MED-SPEED (r.p.m.)	890 - 970		1,050 - 1,140	
	LO-SPEED (r.p.m.)	740 - 810		890 - 970	
OUTDOOR UNIT	TYPE	MFB - 247FB	MFB - 252TA	MFB - 247FB	MFB - 252TA
	(r.p.m.)	735			

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	320 x 1,250 x 195		
OUTDOOR UNIT		643 x 840 x 336		

WEIGHTS

INDOOR UNIT	GROSS / NET(kg)	25/18			
OUTDOOR UNIT		74/66	76/68	75/67	76/68

ADDITIONAL REFRIGERANT CHARGE

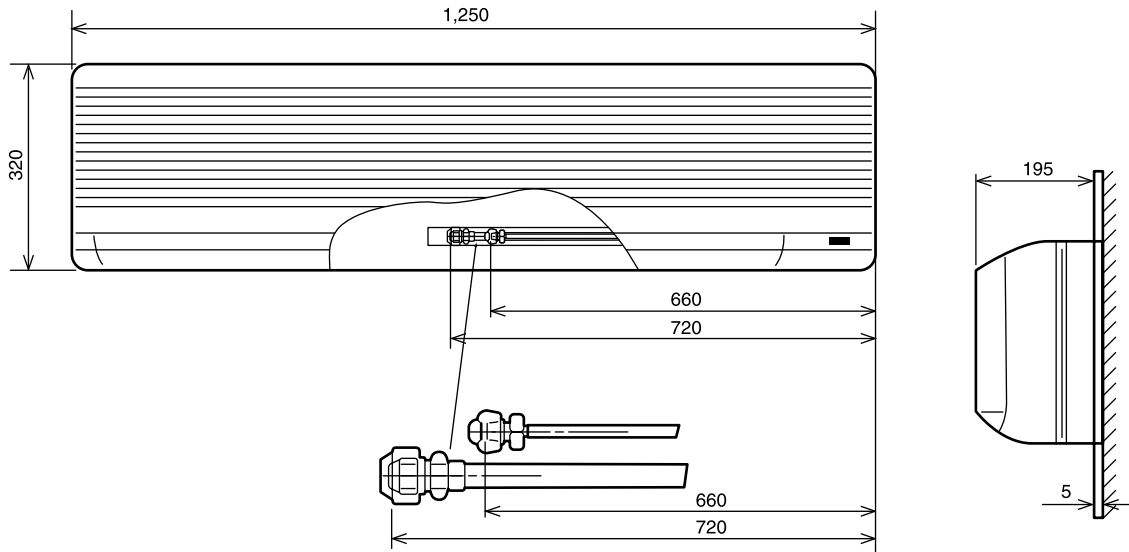
PIPE LENGTH		16 ft(5 m)	33 ft(10 m)	49 ft(15 m)	66 ft(20 m)
FULL CHARGE AMOUNT	ASY20A	1,320g (46.6oz.)	1,380g (48.7oz.)	1,440g (50.8oz.)	1,500g (52.9oz.)
	ASY20R	1,800g (63.5oz.)	2,050g (72.3oz.)	2,300g (81.1oz.)	2,550g (89.9oz.)
	ASY24A	2,000g (70.5oz.)	2,060g (72.7oz.)	2,120g (74.8oz.)	2,180g (76.9oz.)
	ASY24R	2,070g (73.0oz.)	2,320g (81.8oz.)	2,570g (90.7oz.)	2,820g (99.5oz.)

Note : It is in the case that 5 m are exceeded, when using a connection pipe other than that in the table, charge additional refrigerant with 50g(1.76oz.)/1m(3.3ft)for 20R, 24R Models and 12g(0.42 oz.)/1m(3.3ft) for 20A, 24A Models as the criteria.

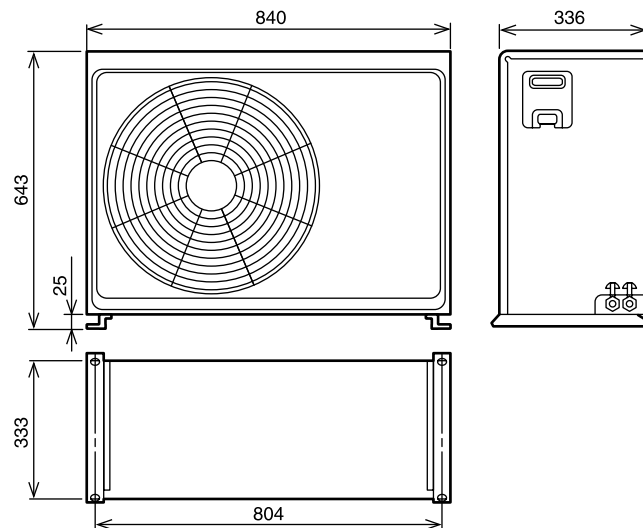
OUTLINE AND DIMENSIONS

Models : ASY20AGD-W / ASY20RGD-W
ASY24AGD-W / ASY24RGD-W

Unit : mm

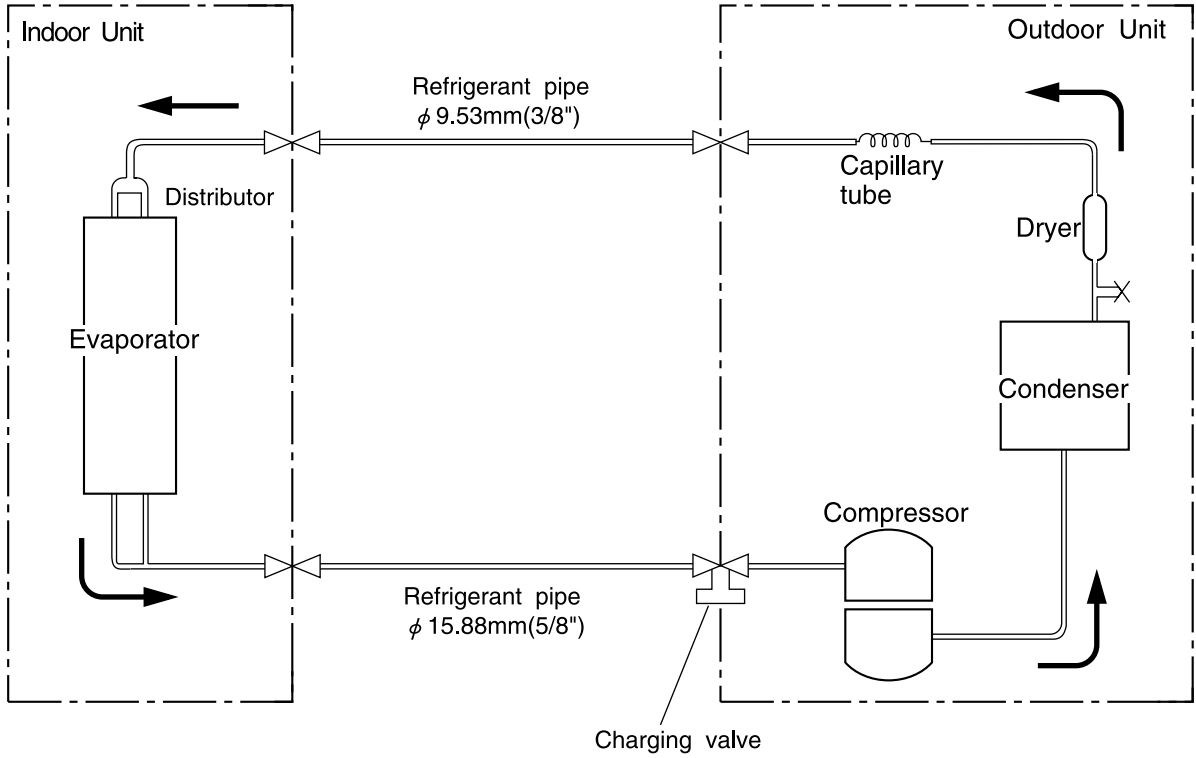


Models : AOY20AZA / AOY20RZDL
AOY24ABA / AOY24RZDL

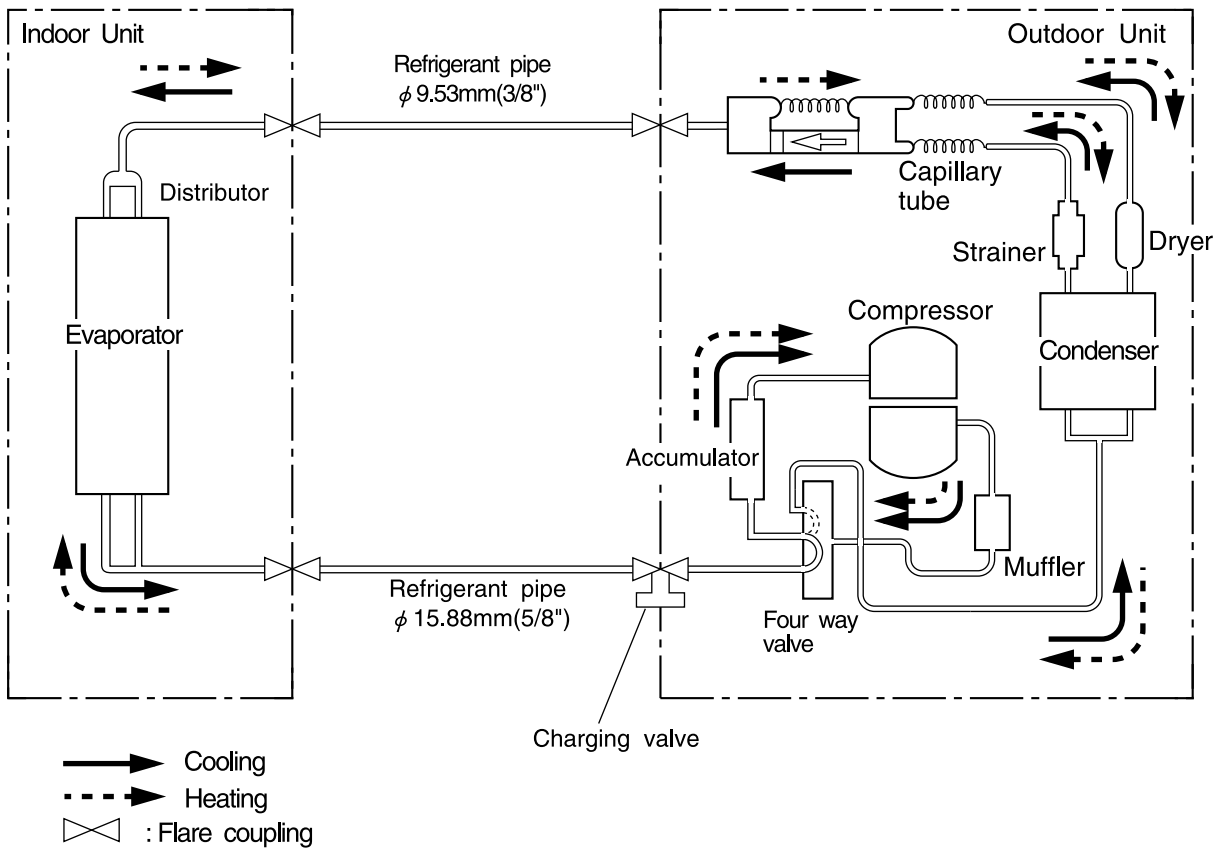


REFRIGERANT SYSTEM DIAGRAM

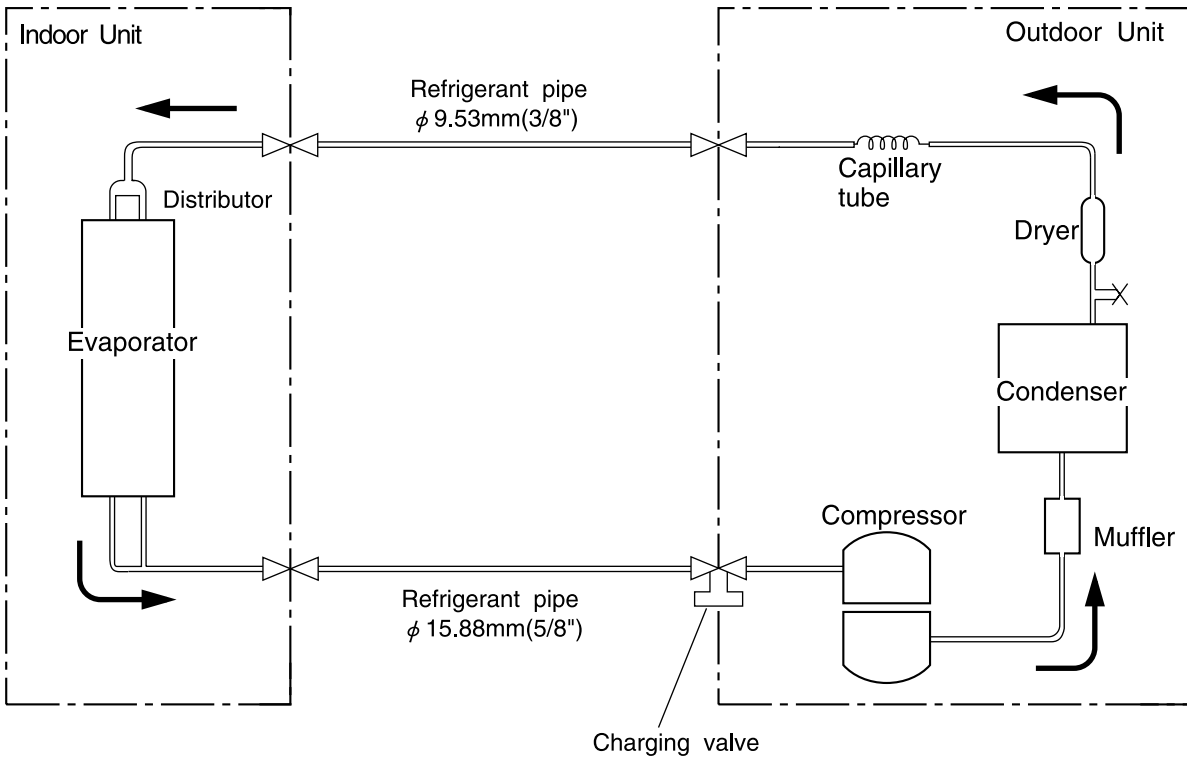
Models : ASY20AGD-W / AOY20AZA



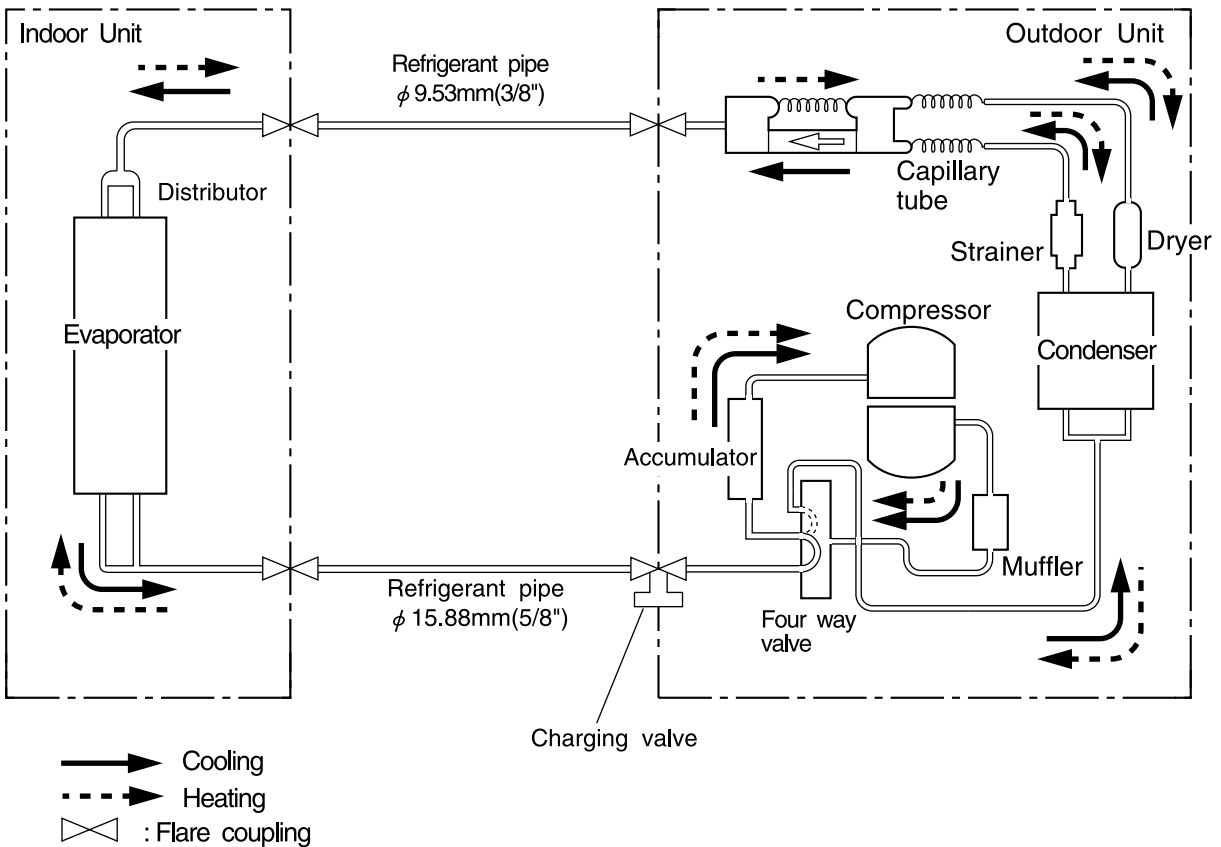
Models : ASY20RGD-W / AOY20RZDL



Models : ASY24AGD-W / AOY24ABA

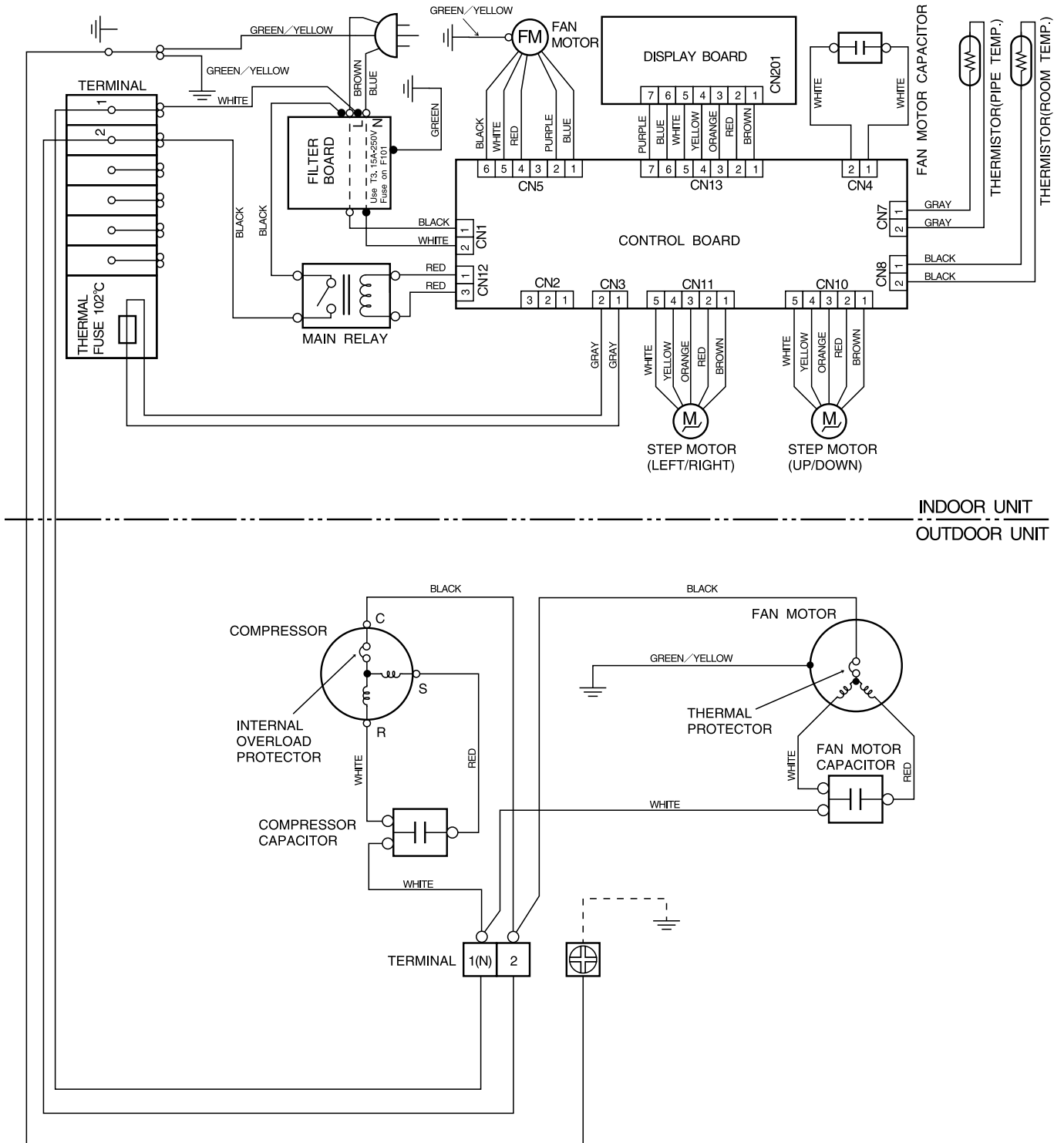


Models : ASY24RGD-W / AOY24RZDL

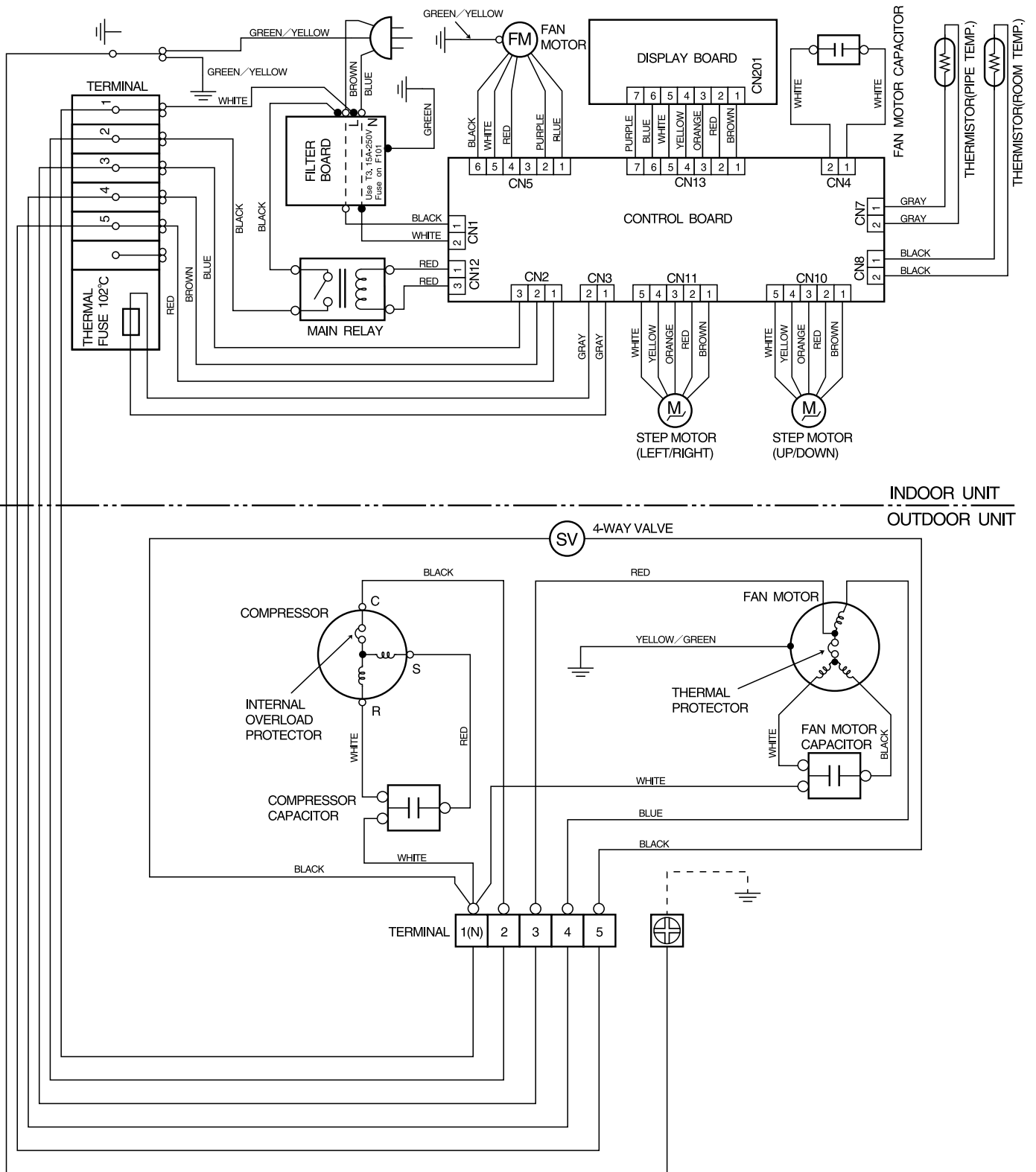


CIRCUIT DIAGRAM

Models : ASY20AGD-W / AOY20AZA
 ASY24AGD-W / AOY24ABA

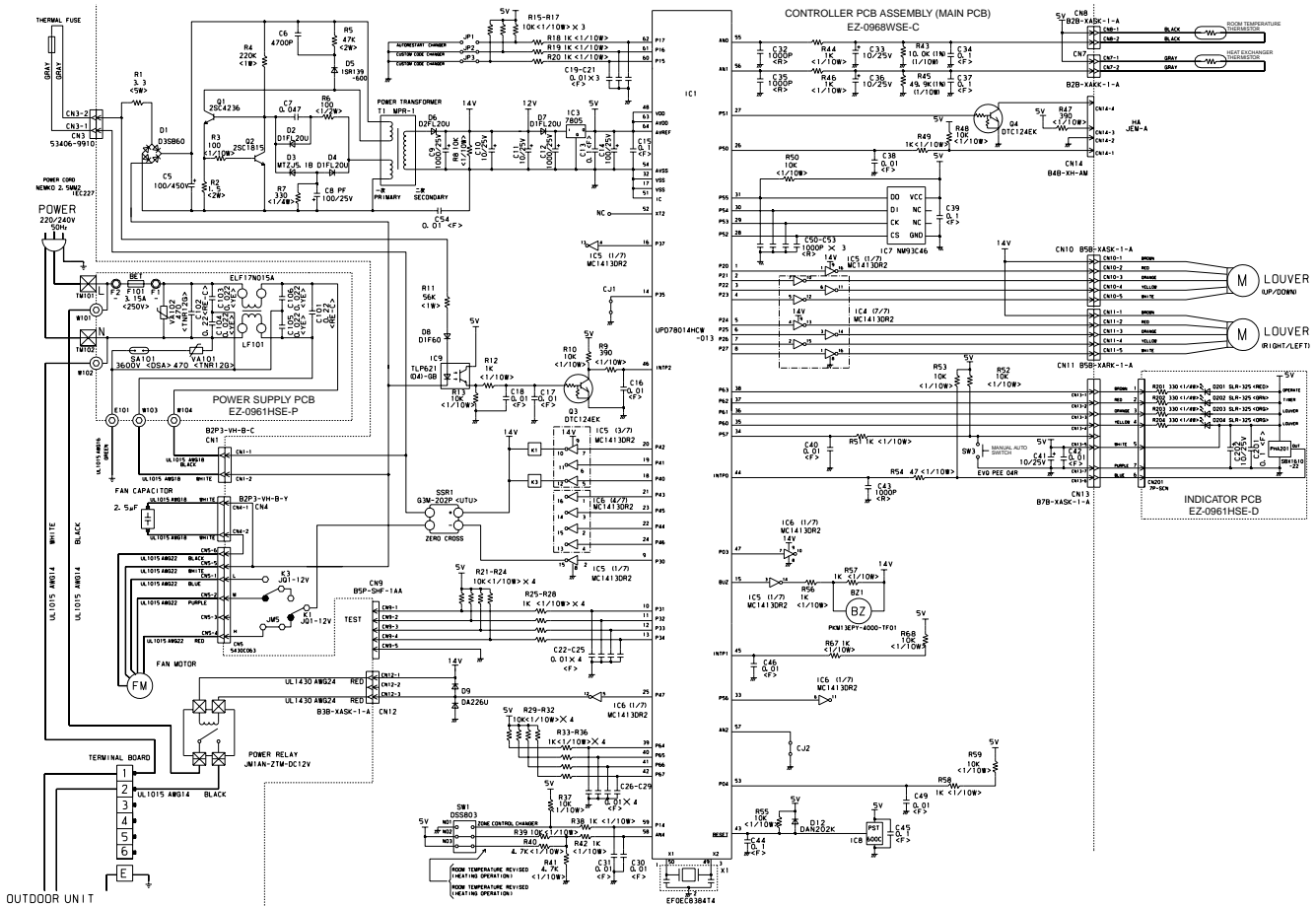


Models : ASY20RGD-W / AOY20ABA
 ASY24RGD-W / AOY24RZDL



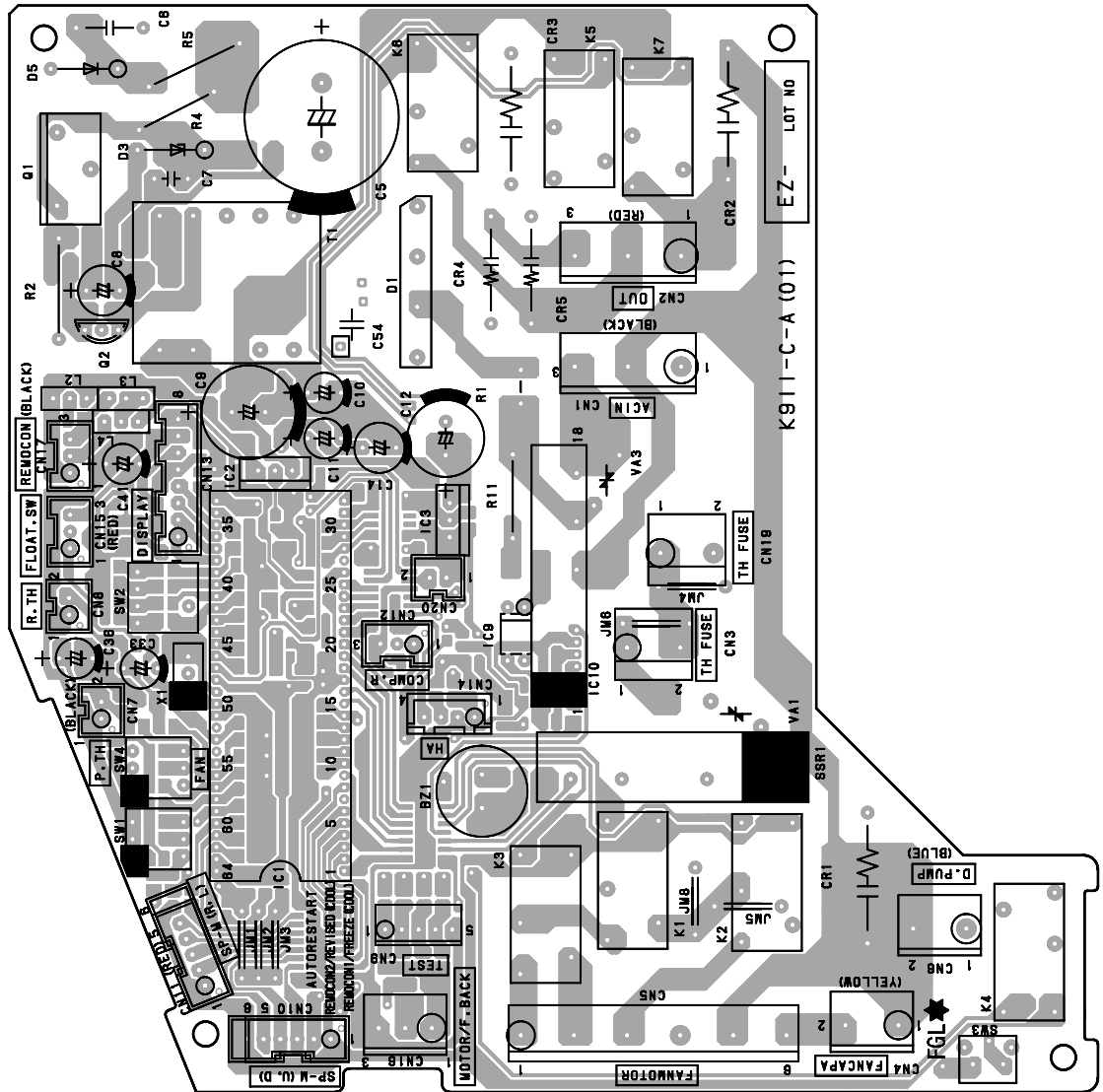
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Models : ASY20AGD-W
ASY24AGD-W

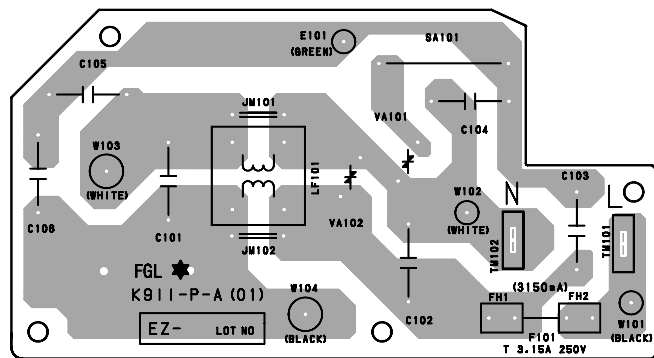


P.C. BOARD LAYOUTS

CONTROLLER PCB ASSEMBLY (MAIN PCB)
(Viewed from the component side)

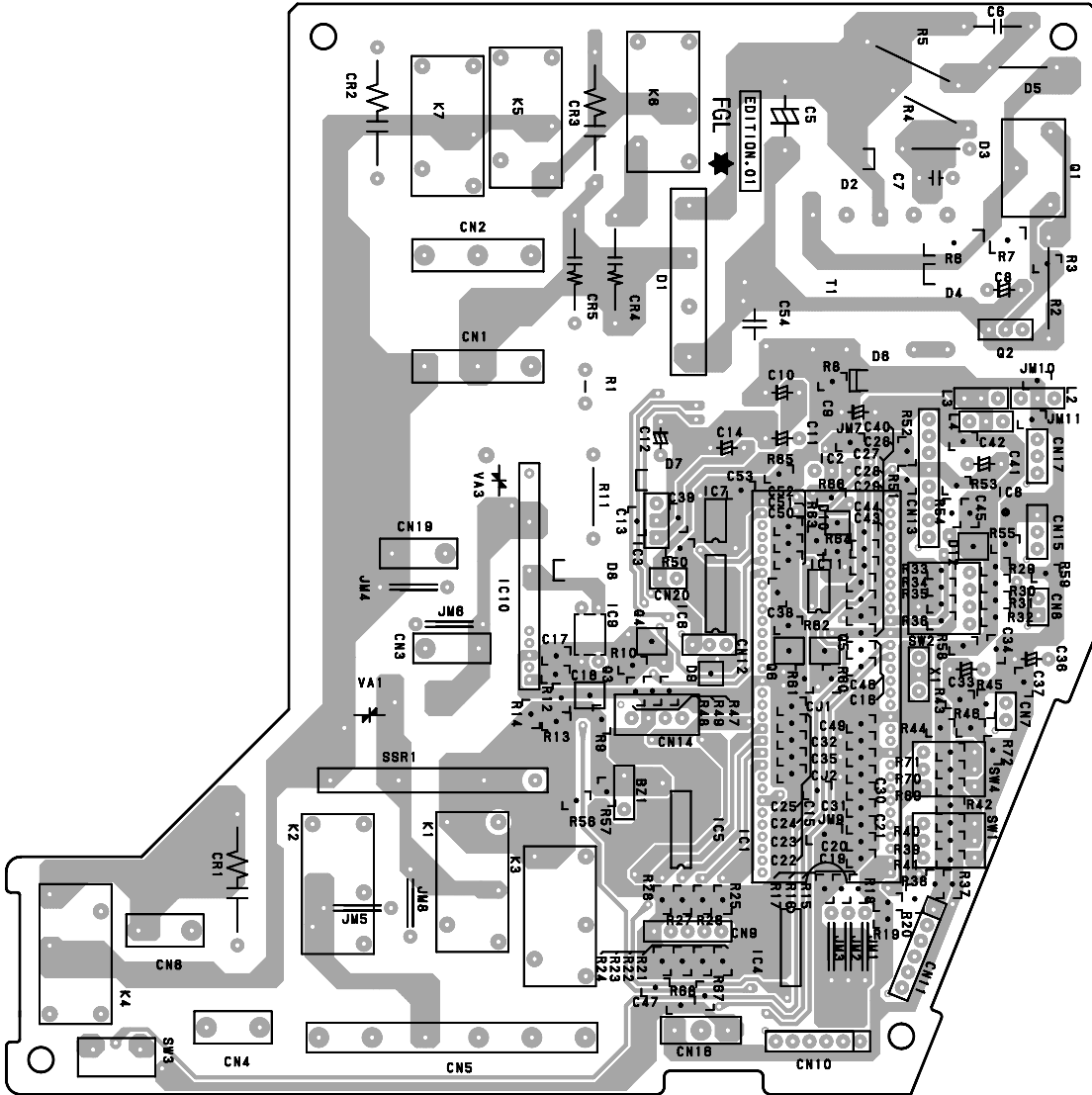


FILTER PCB ASSEMBLY
(Viewed from the component side)



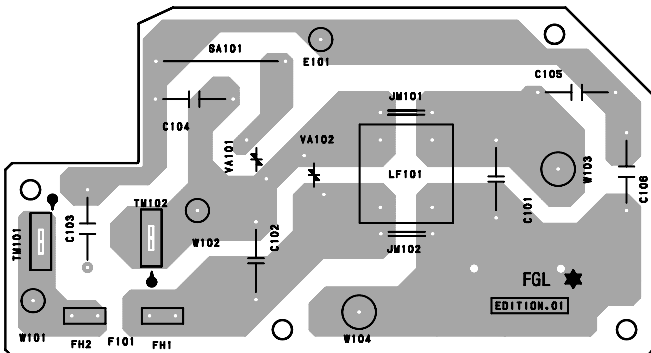
CONTROLLER PCB ASSEMBLY (MAIN PCB)

(Viewed from the solder side)



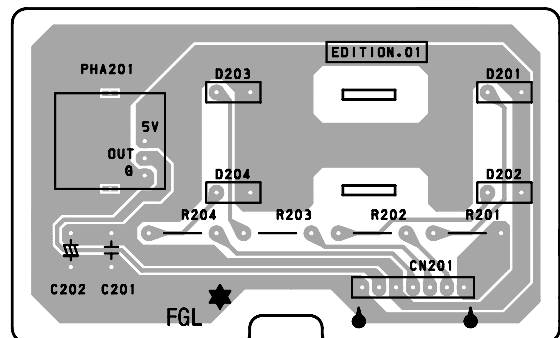
FILTER PCB ASSEMBLY

(Viewed from the solder side)



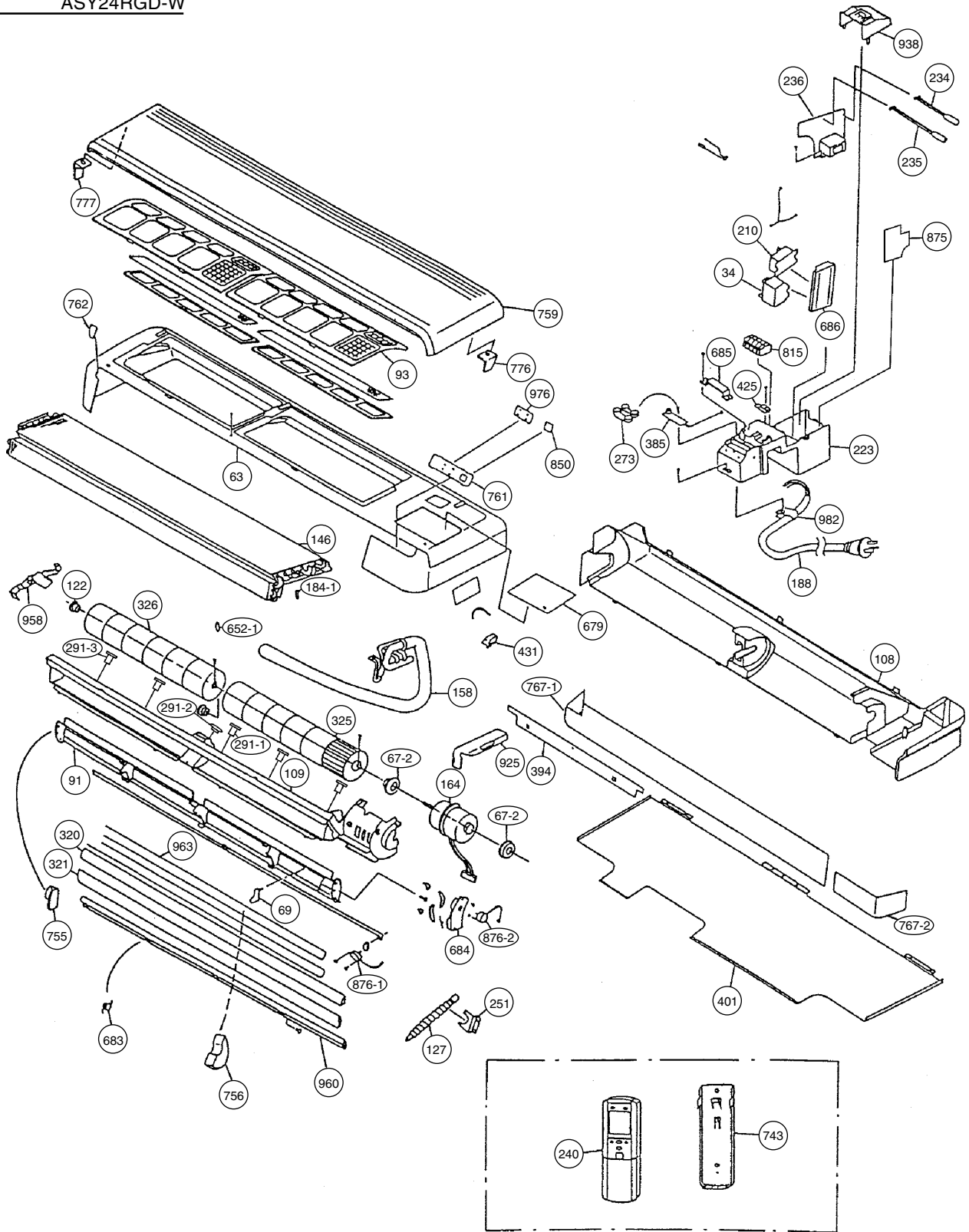
INDICATOR PCB ASSEMBLY

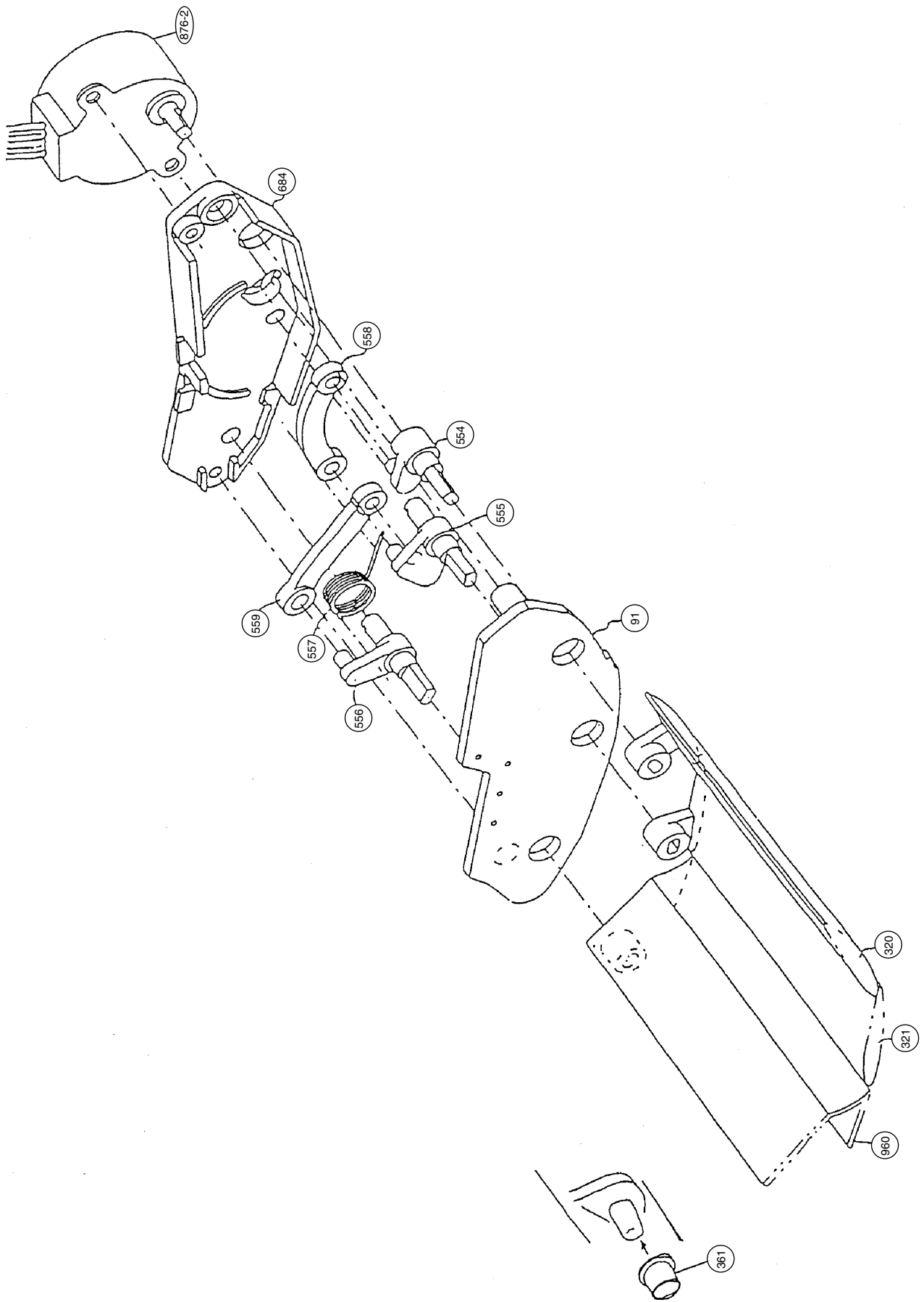
(Viewed from the solder side)

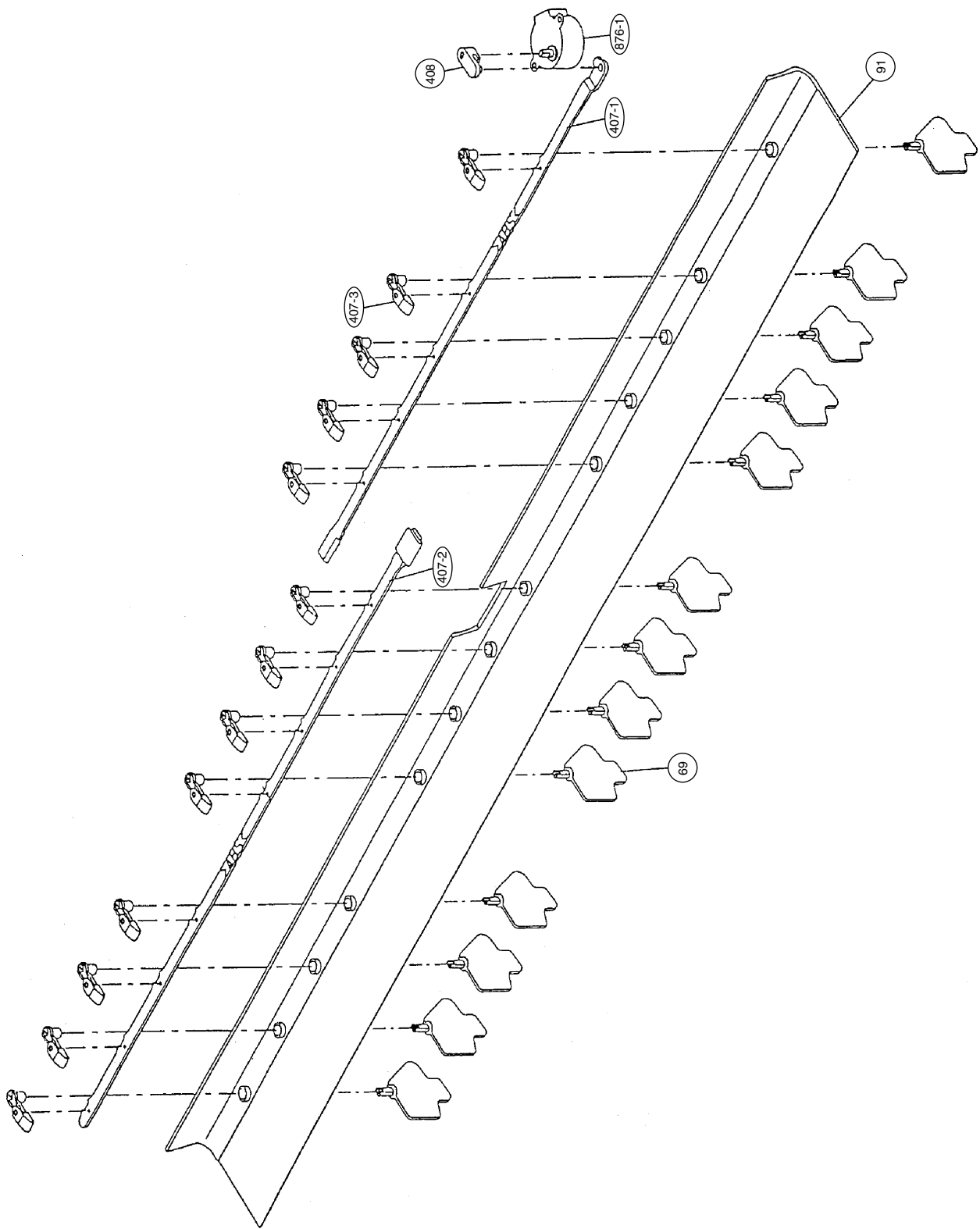


DISASSEMBLY ILLUSTRATION

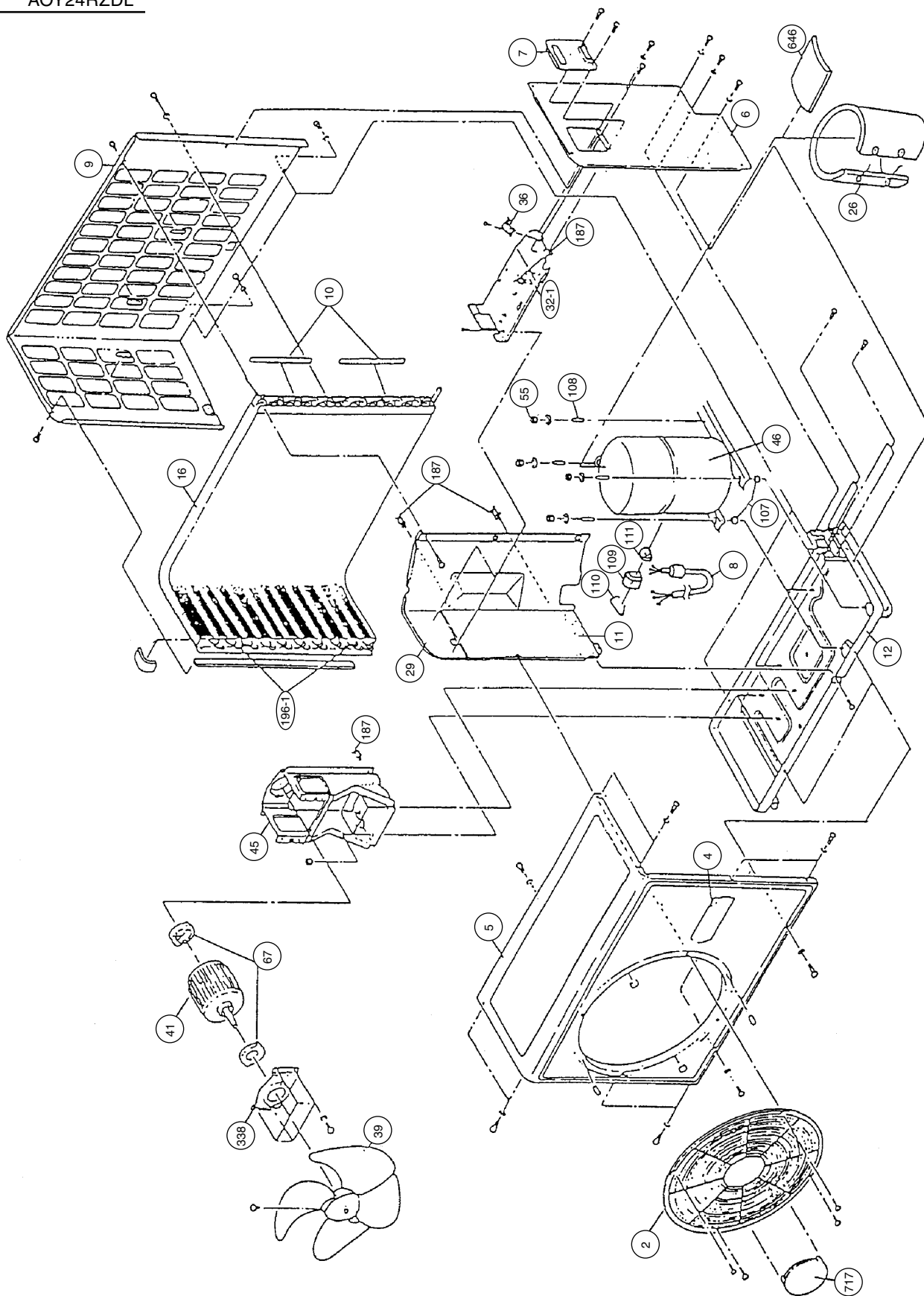
Models : ASY20AGD-W
 ASY20RGD-W
 ASY24AGD-W
 ASY24RGD-W



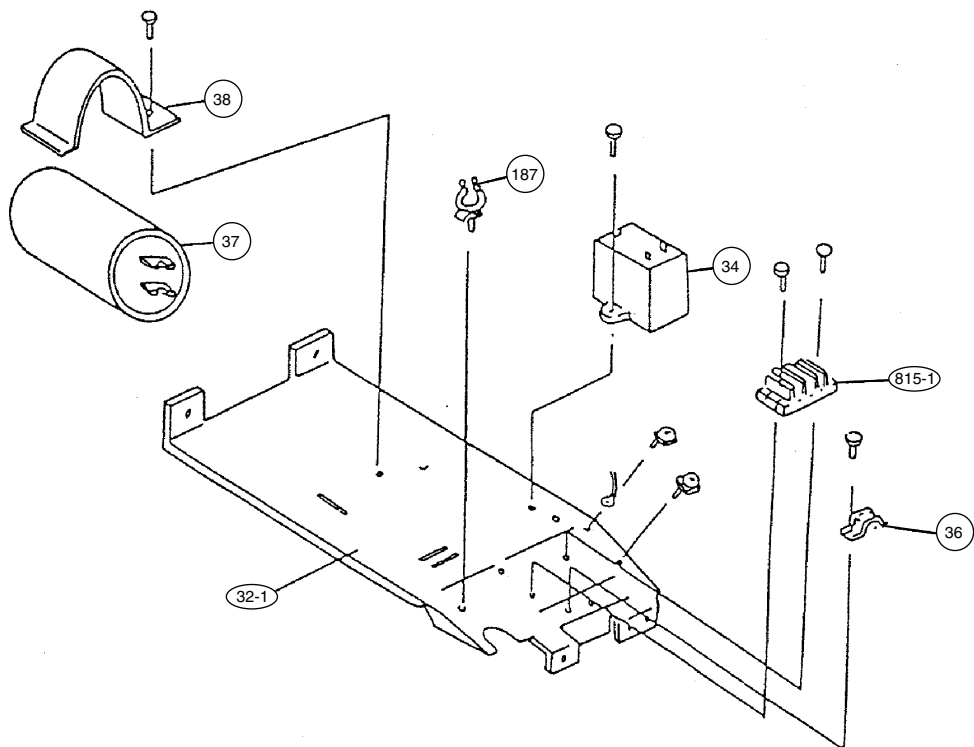
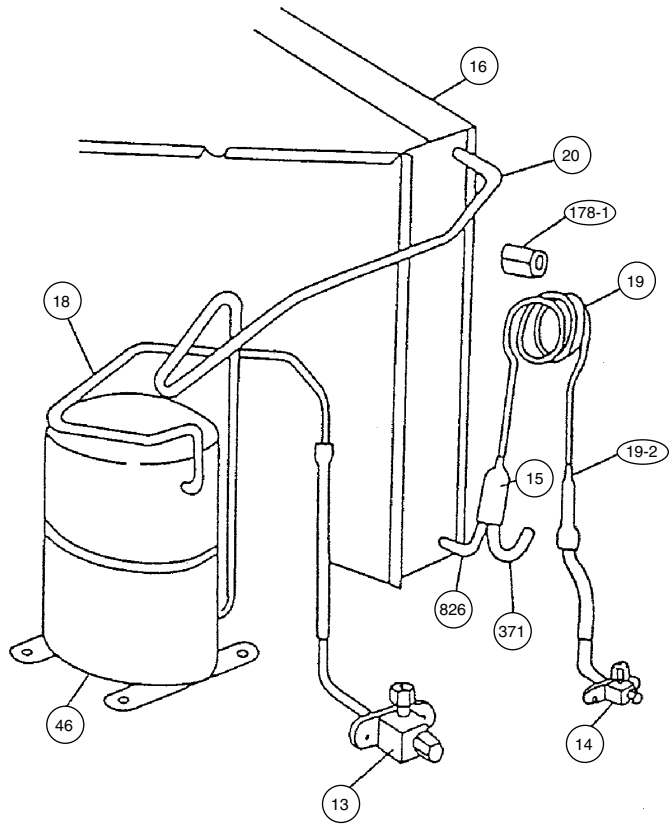




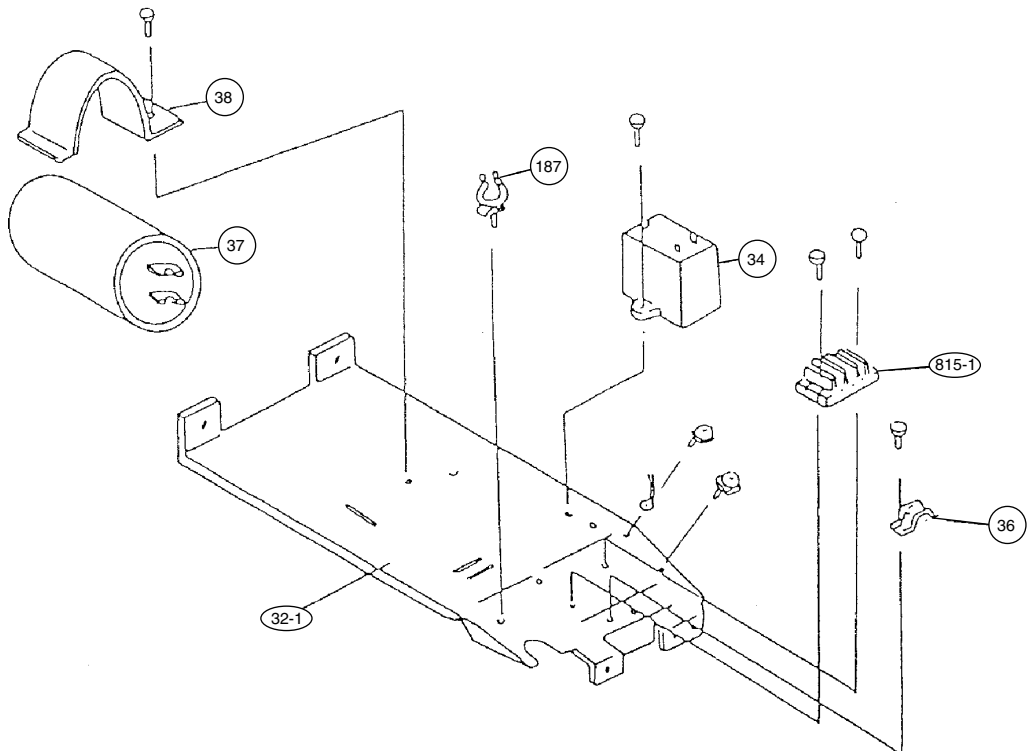
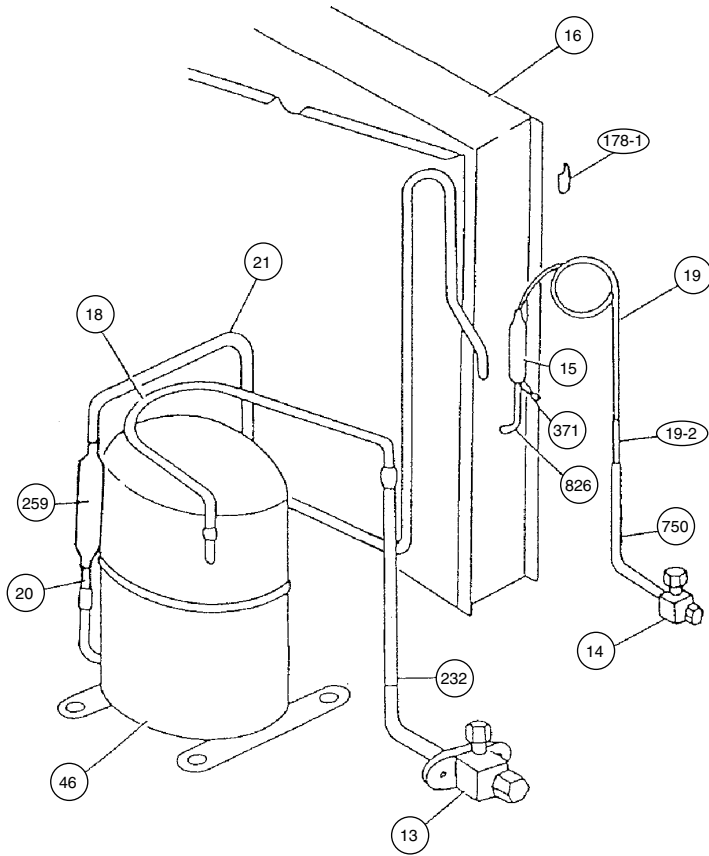
Models : AOY20AZA
AOY20RZDL
AOY24ABA
AOY24RZDL



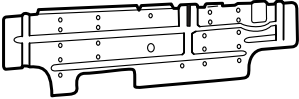
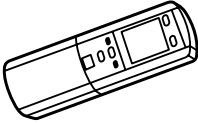
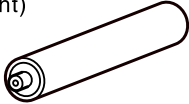
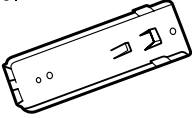
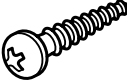

Model : AOY20AZA




Model : AOY24ABA



INDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Wall hook bracket 	9357952000
Remote control unit 	(20A,24A Model) 9355913023 (20R,24R Model) 9355913016
Battery (penlight) 	0600185534
Remote control unit holder 	9359955016
Tapping screw (big) (ϕ 4 x 20) 	301141164200
Tapping screw (small) (ϕ 3 x 12) 	301141533125

OUTDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Hexagon wrench 	9351228019