

FUJII ELECTRIC

SPLIT TYPE ROOM AIR CONDITIONER

CEILING type (50Hz)

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RY-36CA	RO-36CA
	RY-36HA	RO-36HA

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

TYPE		COOL	COOL & HEAT
INDOOR UNIT		RY-36CA	RY-36HA
OUTDOOR UNIT		RO-36CA	RO-36HA
COOLING CAPACITY	(kW)	10.3 - 10.5	10.3 - 10.5
HEATING CAPACITY	(kW)	————	10.5 - 10.7

ELECTRICAL DATA

POWER SOURCE	(V)	380 - 415	
FREQUENCY	(Hz)	3ø / 50	
RUNNING CURRENT	(A)	COOLING	7.0 - 7.2
		HEATING	————
INPUT WATTS	(kW)	COOLING	3.80 - 3.90
		HEATING	————
E.E.R.	(kW/kW)	COOLING	2.71 - 2.69
		HEATING	————
MOISTURE REMOVAL	(ℓ/hr)	4.0	
AIR CIRCULATION-Hi	(m ³ /hr)	1,660	

COMPRESSOR

TYPE	Hermetic type, 2 pole, 3-phase, Induction motor		
CODE	CR47KQ-TFD		
REFRIGERANT	R-22	(g)	2,350
			3,000

FAN MOTOR

POWER SOURCE	(V)	220 - 240	
INDOOR UNIT	TYPE	MFA-45DZM	
	HI-SPEED (r.p.m.)	1,000	
	MED-SPEED (r.p.m.)	900	
	LO-SPEED (r.p.m.)	750	
OUTDOOR UNIT	TYPE	MFB-362FT	
	HI-SPEED (r.p.m.)	790	
	LO-SPEED (r.p.m.)	510	

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	240 x 1,660 x 700	
OUTDOOR UNIT		1,152 x 940 x 370	

WEIGHT

INDOOR UNIT	GROSS / NET (kg)	61 / 48	
OUTDOOR UNIT		108 / 94	110 / 96

ADDITIONAL REFRIGERANT

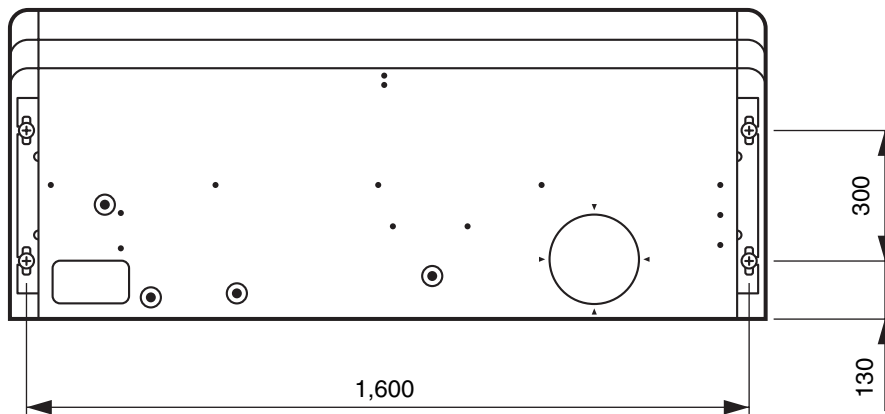
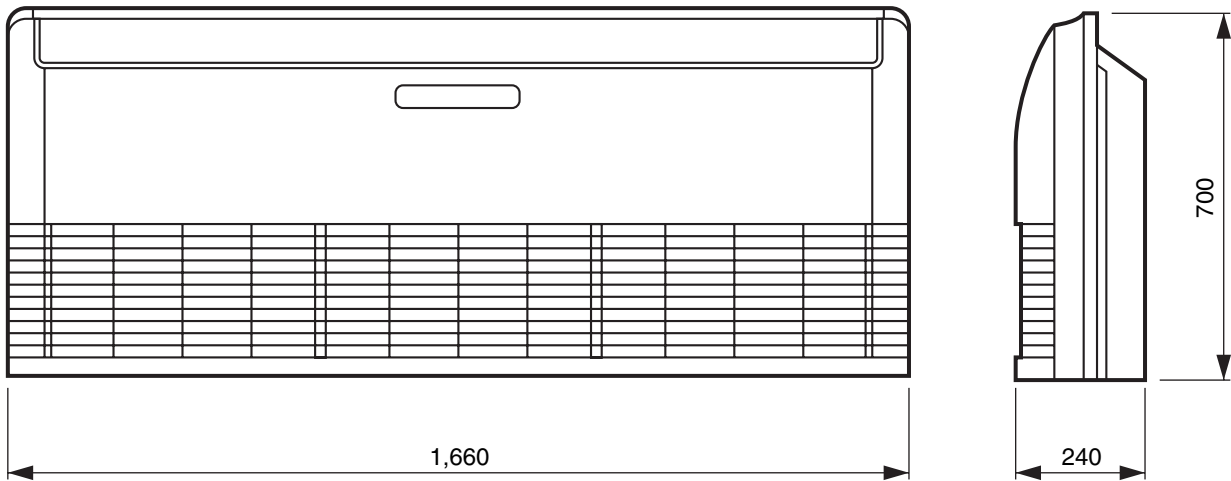
PIPE LENGTH		5 m (16 ft)	10 m (33 ft)	20 m (66 ft)	25 m (82 ft)	30 m (99 ft)	40 m (132 ft)	50 m (164 ft)
FULL CHARGE AMOUNT	RY-36CA	2,350 g (82.9 oz)			2,550 g (89.9 oz)	2,750 g (97.0 oz)	3,150 g (111.1 oz)	3,550 g (125.2 oz)
	RY-36HA	3,000 g (105.8 oz)			3,200 g (112.9 oz)	3,400 g (119.9 oz)	3,800 g (134.0 oz)	4,200 g (148.2 oz)

Note : • Between 5 m and 50 m, when using a connection pipe other than in the table, charge additional refrigerant with 40 g (1.41 oz) / 1 m (3.3 ft) as the criteria.
• Additional gas charge is not necessary with pipe length up to 20 m.

OUTLINE AND DIMENSIONS

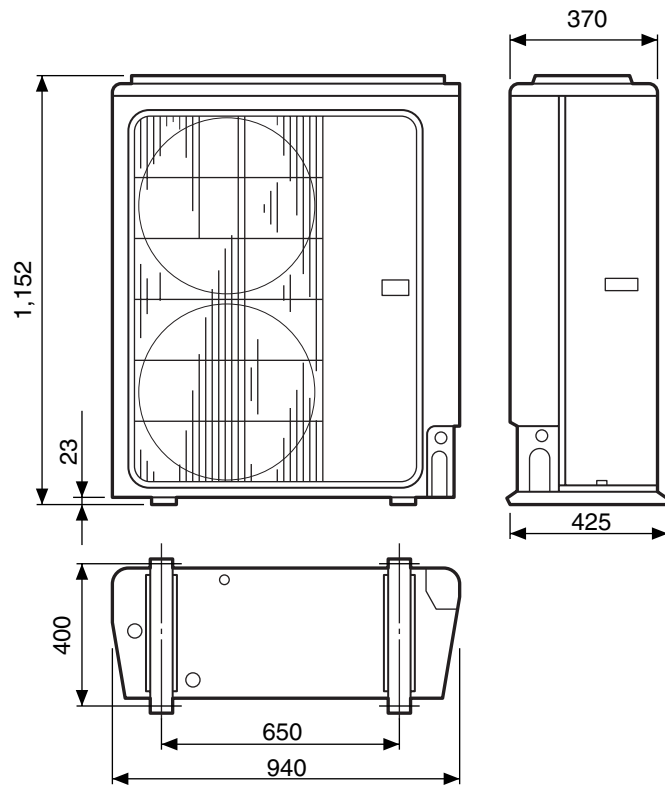
Models : RY-36CA
RY-36HA

(Unit : mm)



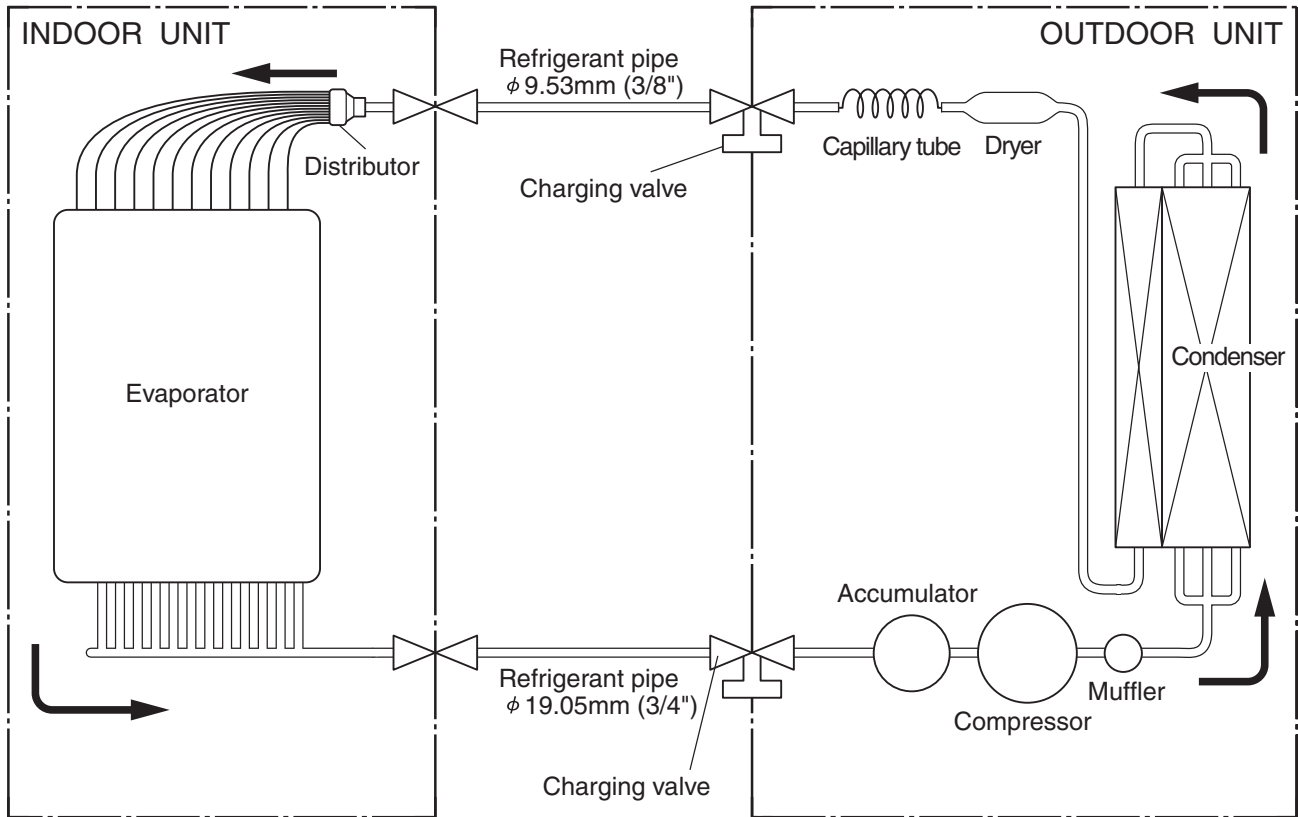
Models : RO-36CA
RO-36HA

(Unit : mm)

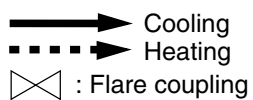
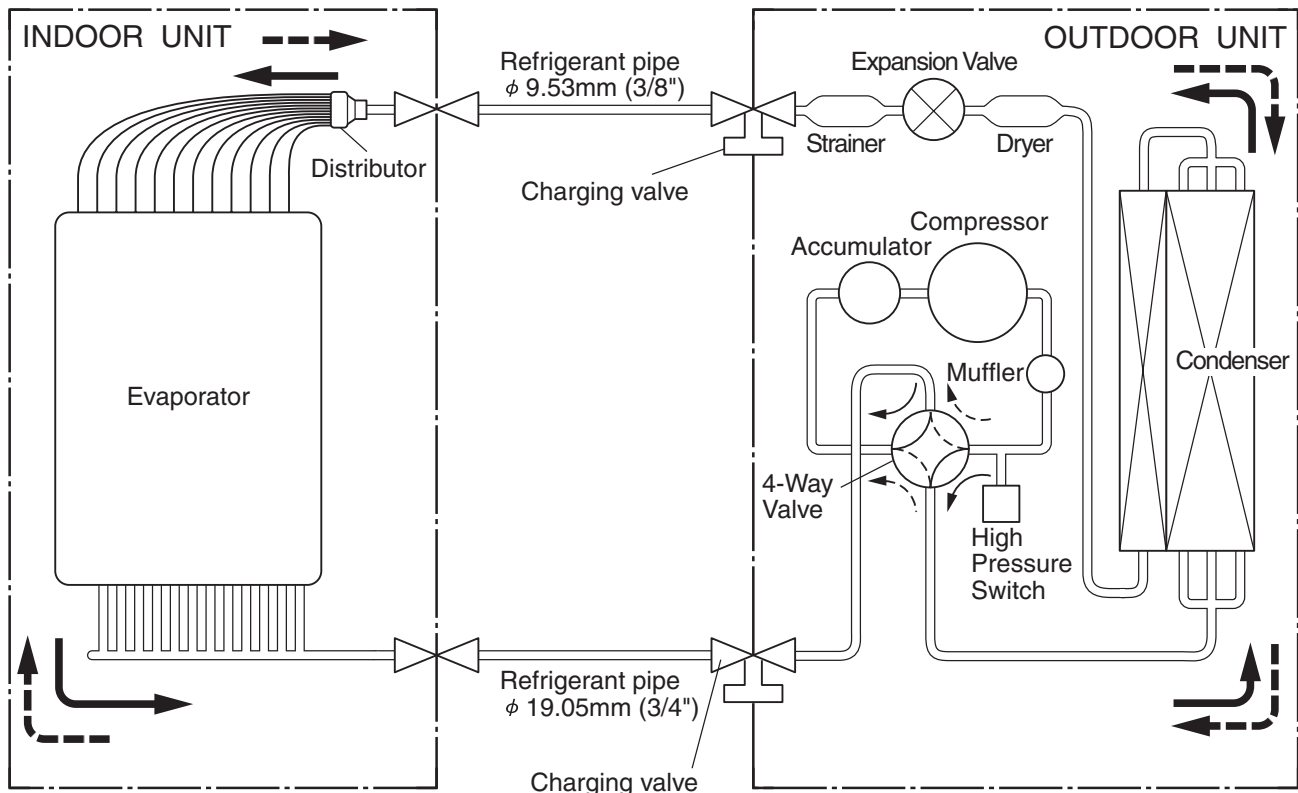


REFRIGERANT SYSTEM DIAGRAM

Models : RY-36CA / RO-36CA



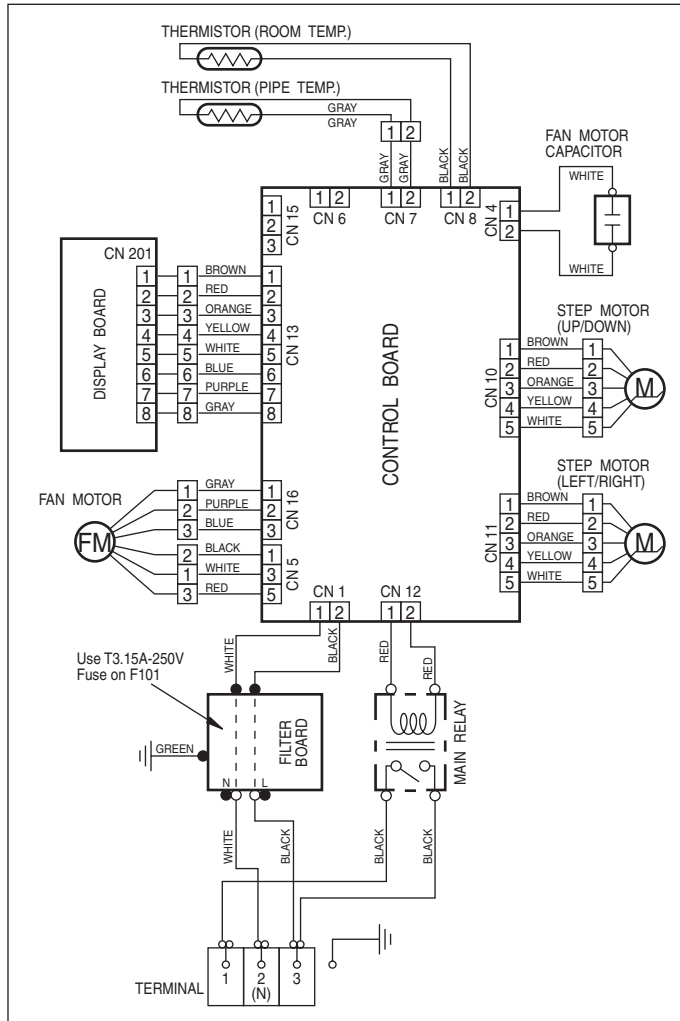
Models : RY-36HA / RO-36HA



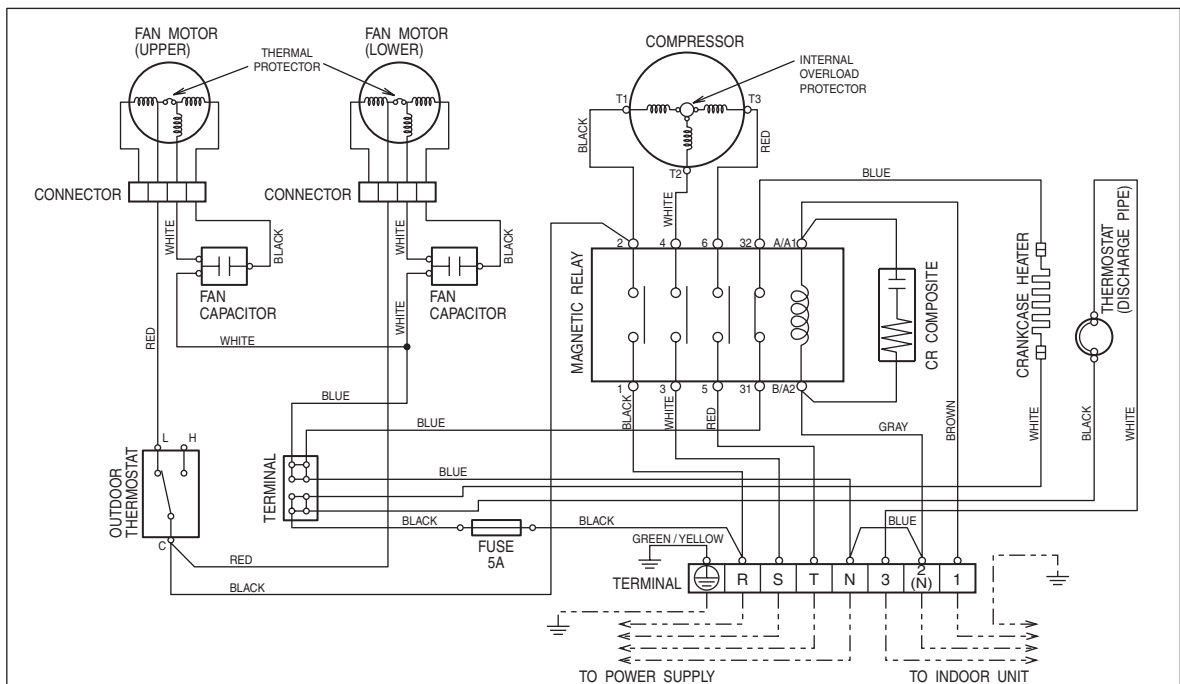
CIRCUIT DIAGRAM

Models : RY-36CA / RO-36CA

INDOOR UNIT

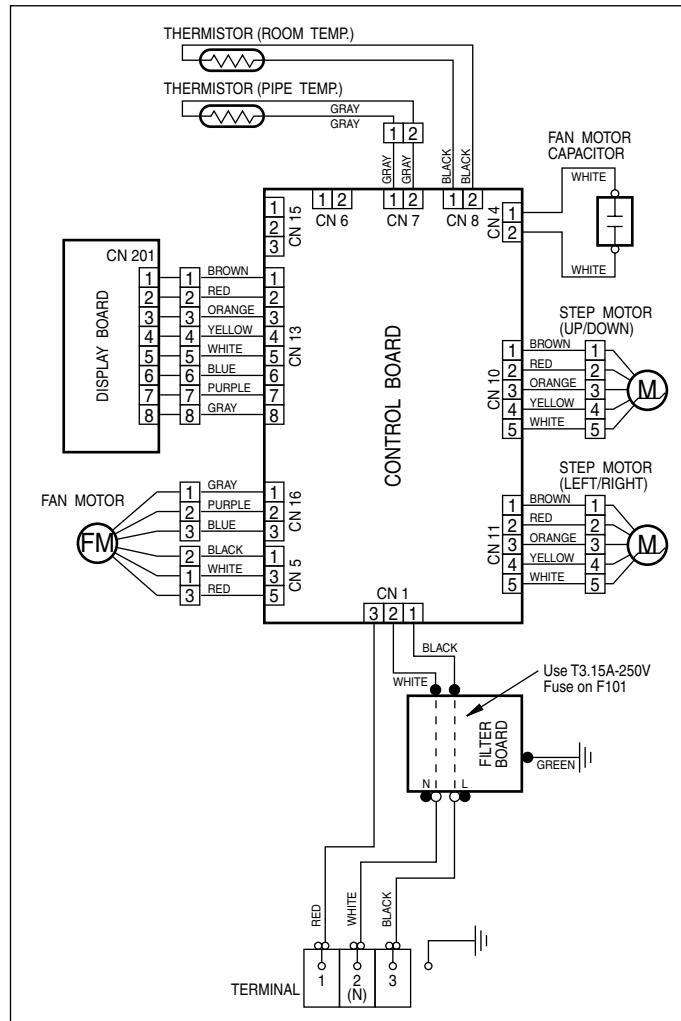


OUTDOOR UNIT

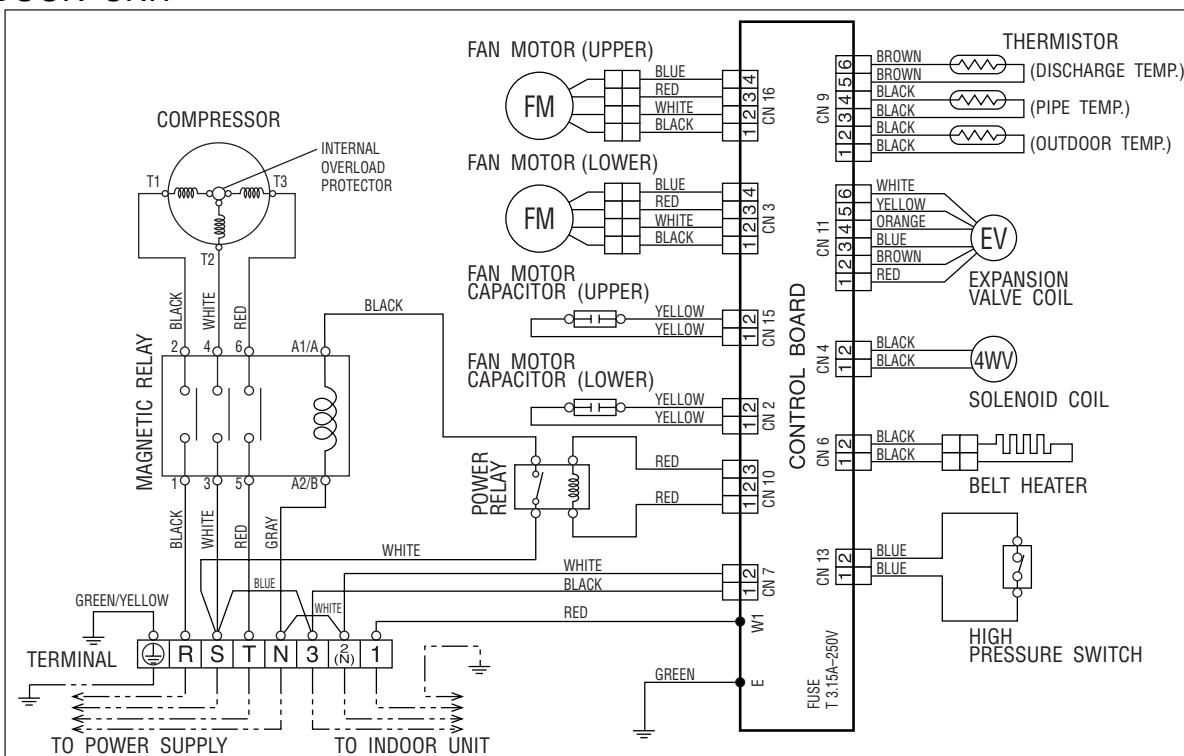


Models : RY-36HA / RO-36HA

INDOOR UNIT

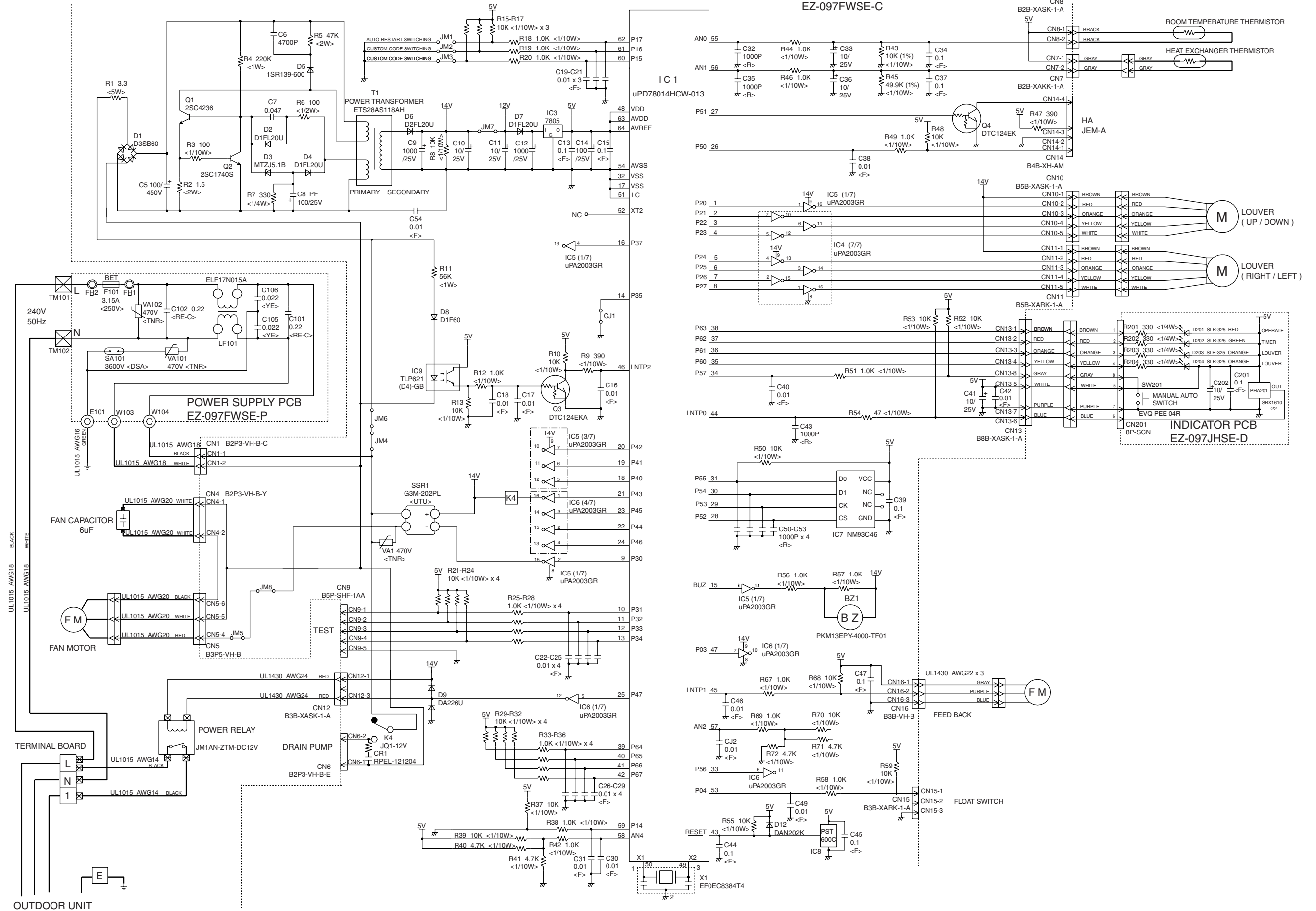


OUTDOOR UNIT

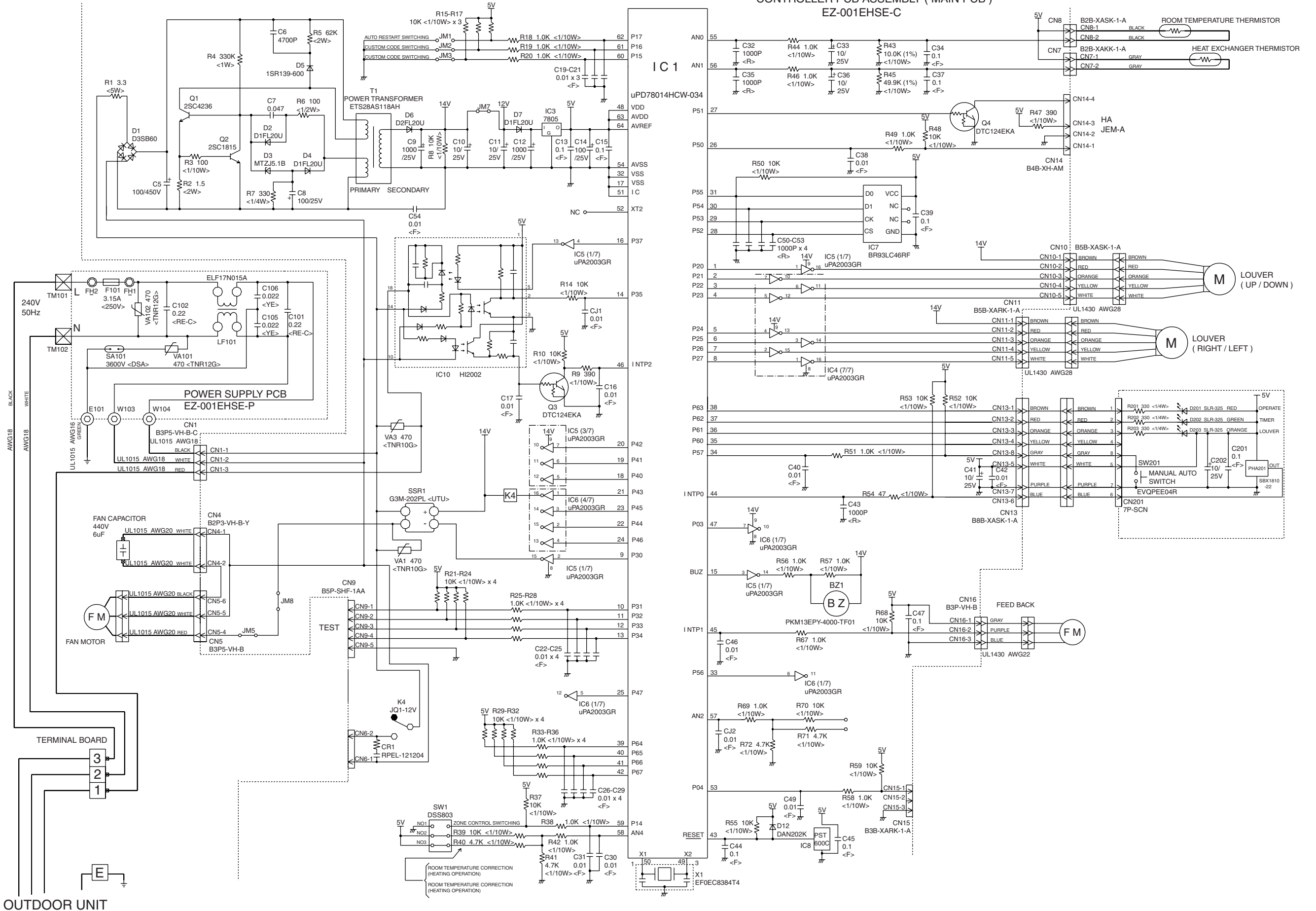


INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model : RY-36CA

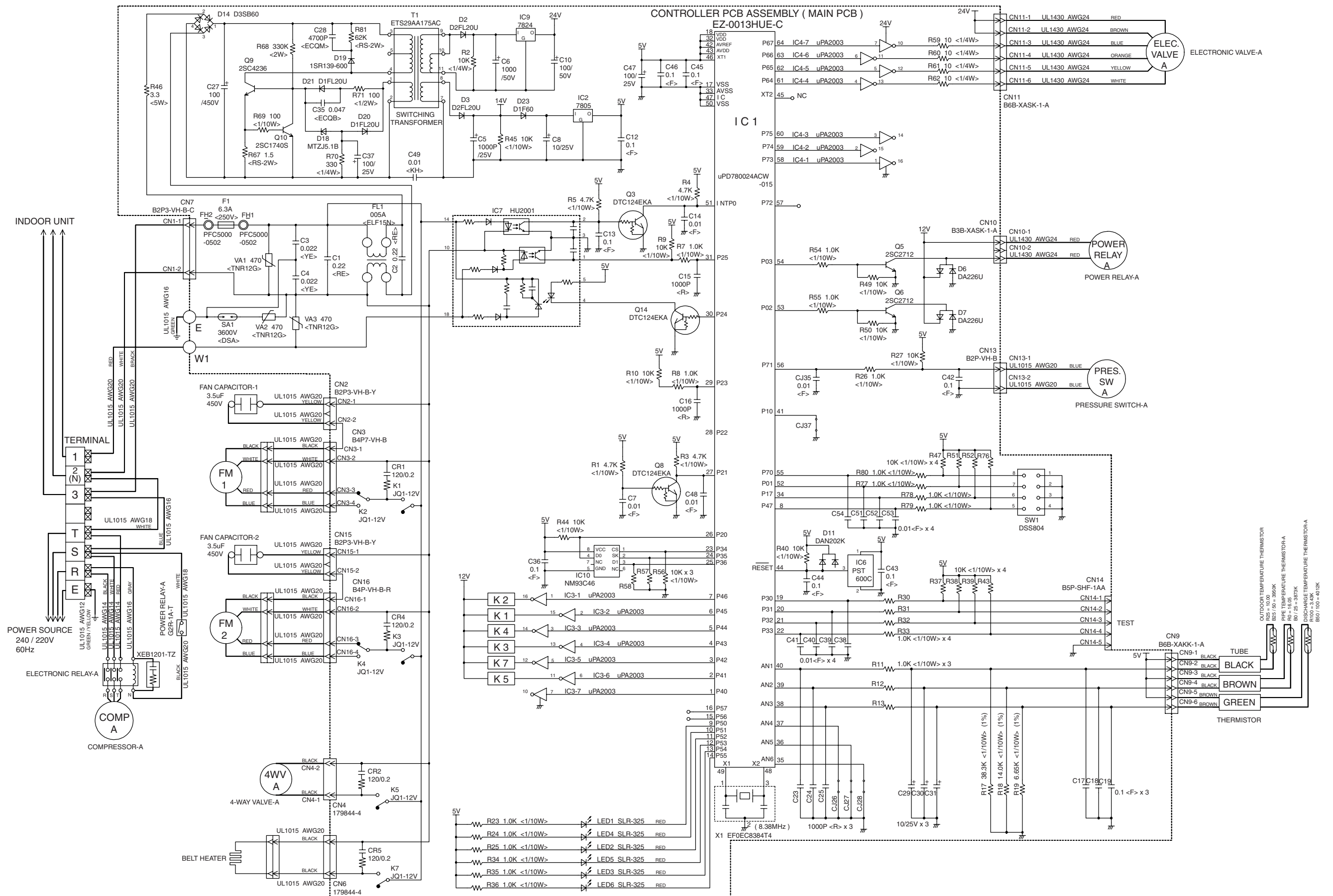


Model : RY-36HA



OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model : RO-36HA

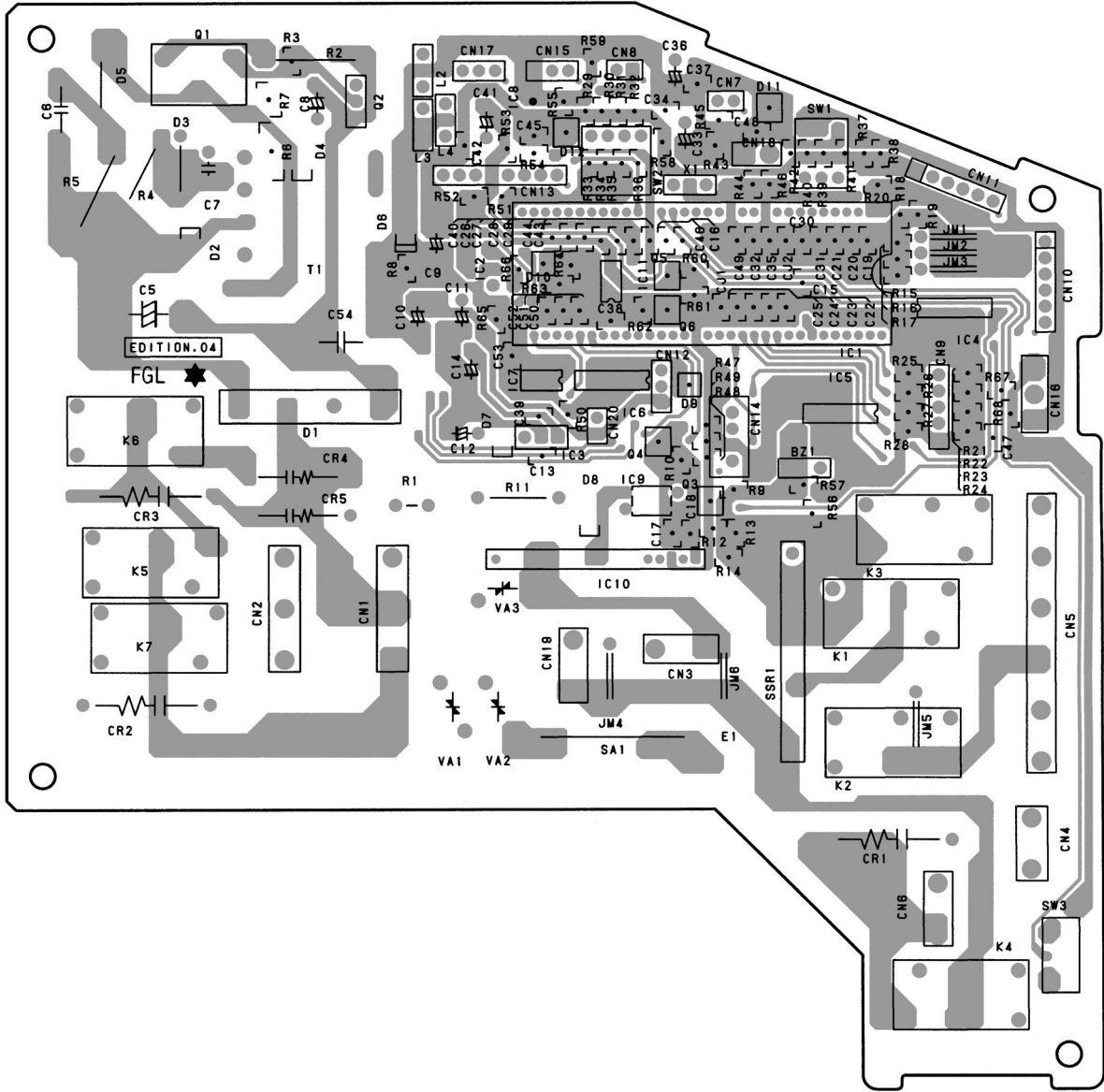


INDOOR P.C. BOARD LAYOUTS

Models : RY-36CA
RY-36HA

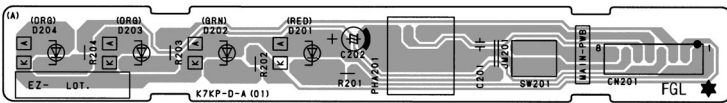
CONTROLLER PCB ASSEMBLY

(Viewed from the solder side)



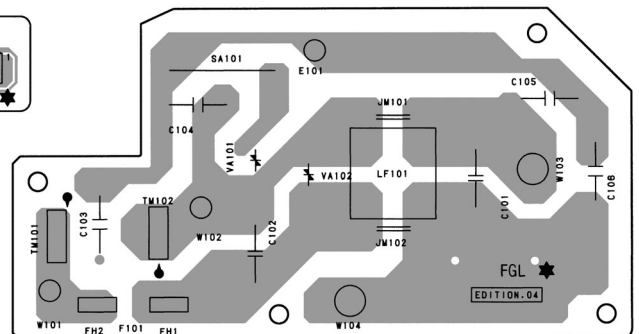
INDICATOR PCB ASSEMBLY

(Viewed from the solder side)



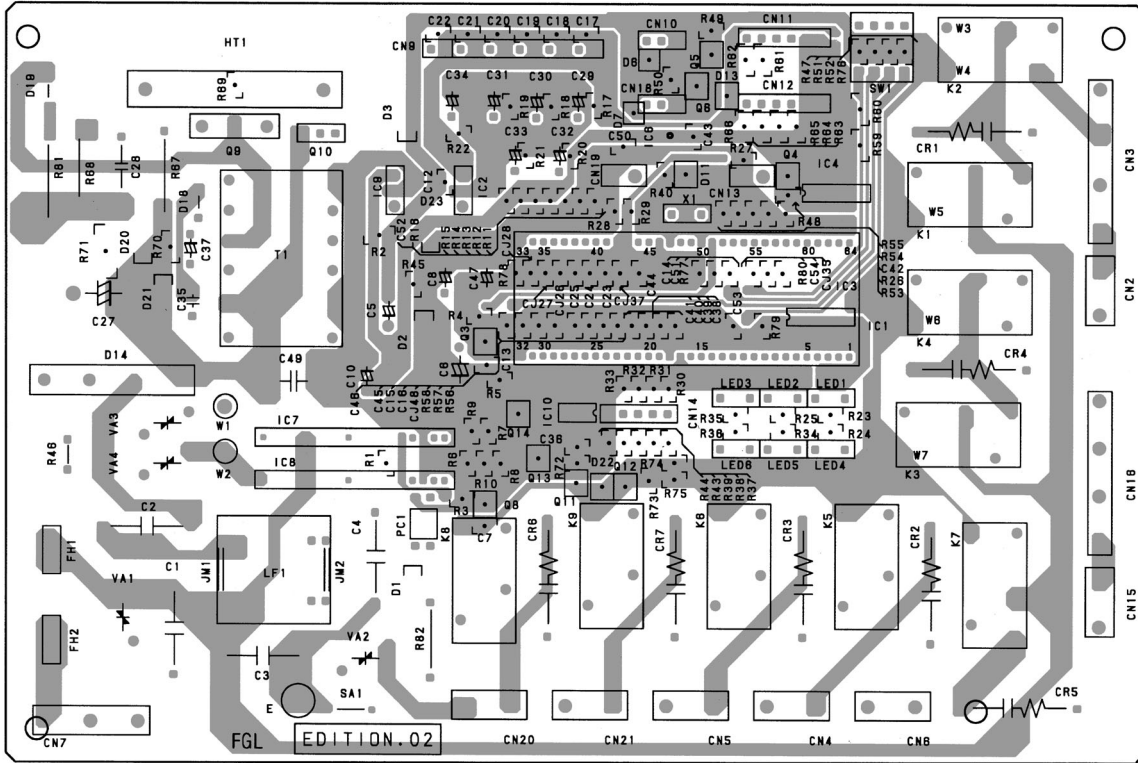
FILTER PCB ASSEMBLY

(Viewed from the solder side)

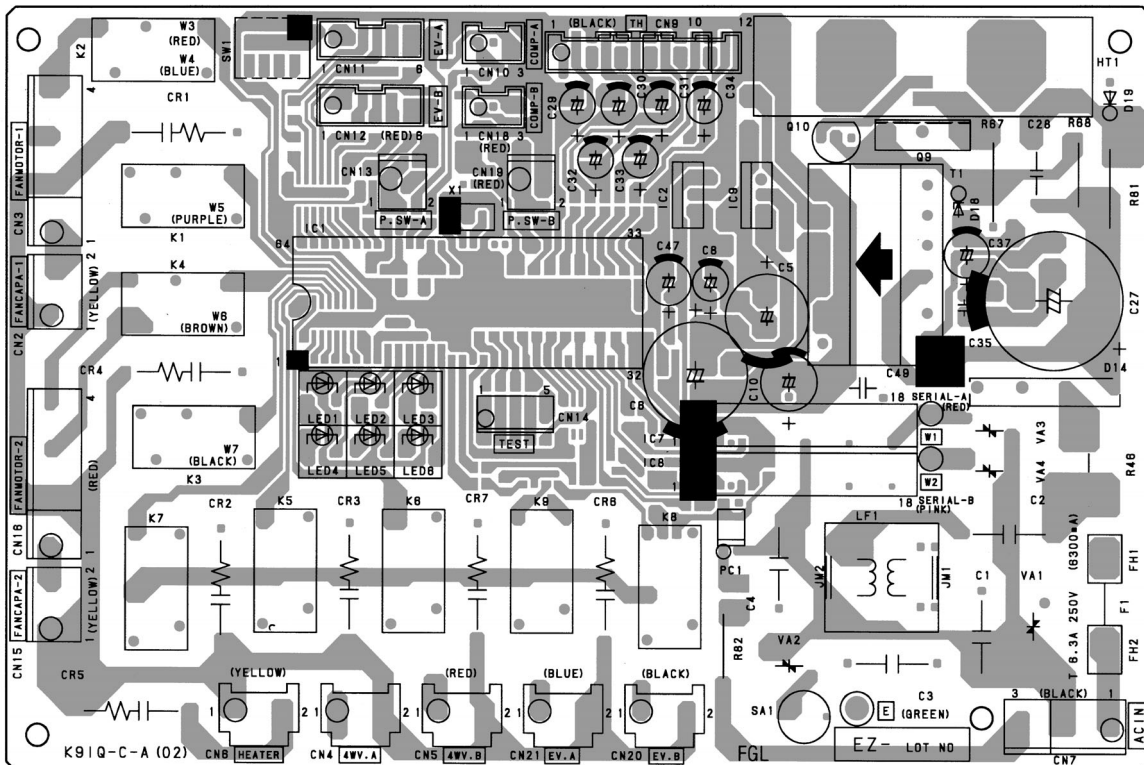


OUTDOOR P.C. BOARD LAYOUTS

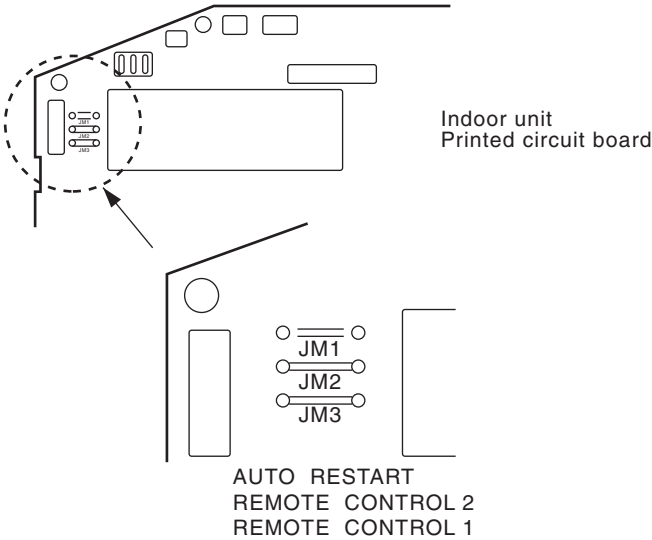
(Viewed from the solder side)



(Viewed from the component side)



REMOTE CONTROL UNIT CODE SWITCHING



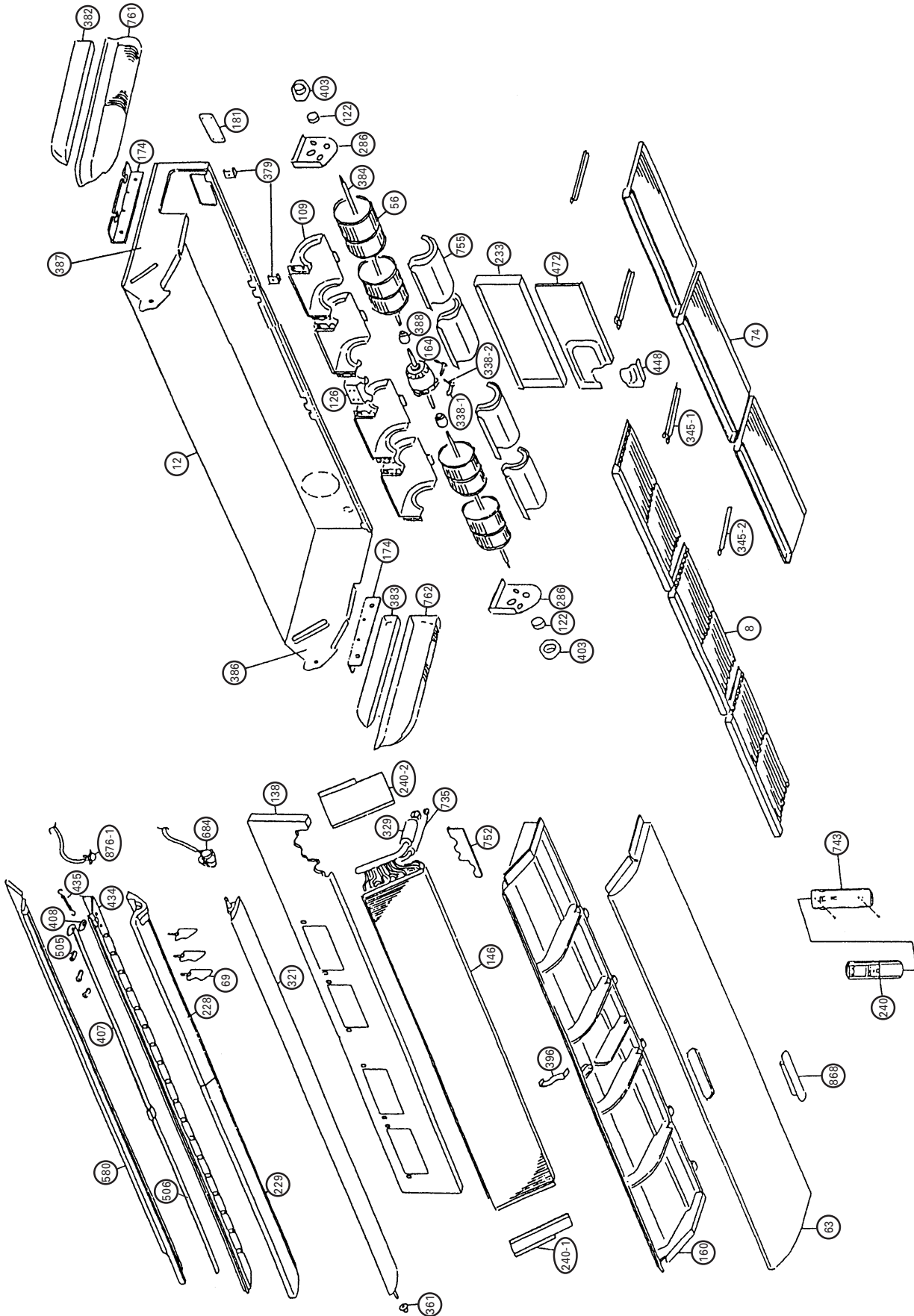
Confirm the remote control unit signal selector switch selection and printed circuit board setting. If these are not confirmed, the remote control unit cannot be operated for the air conditioner.

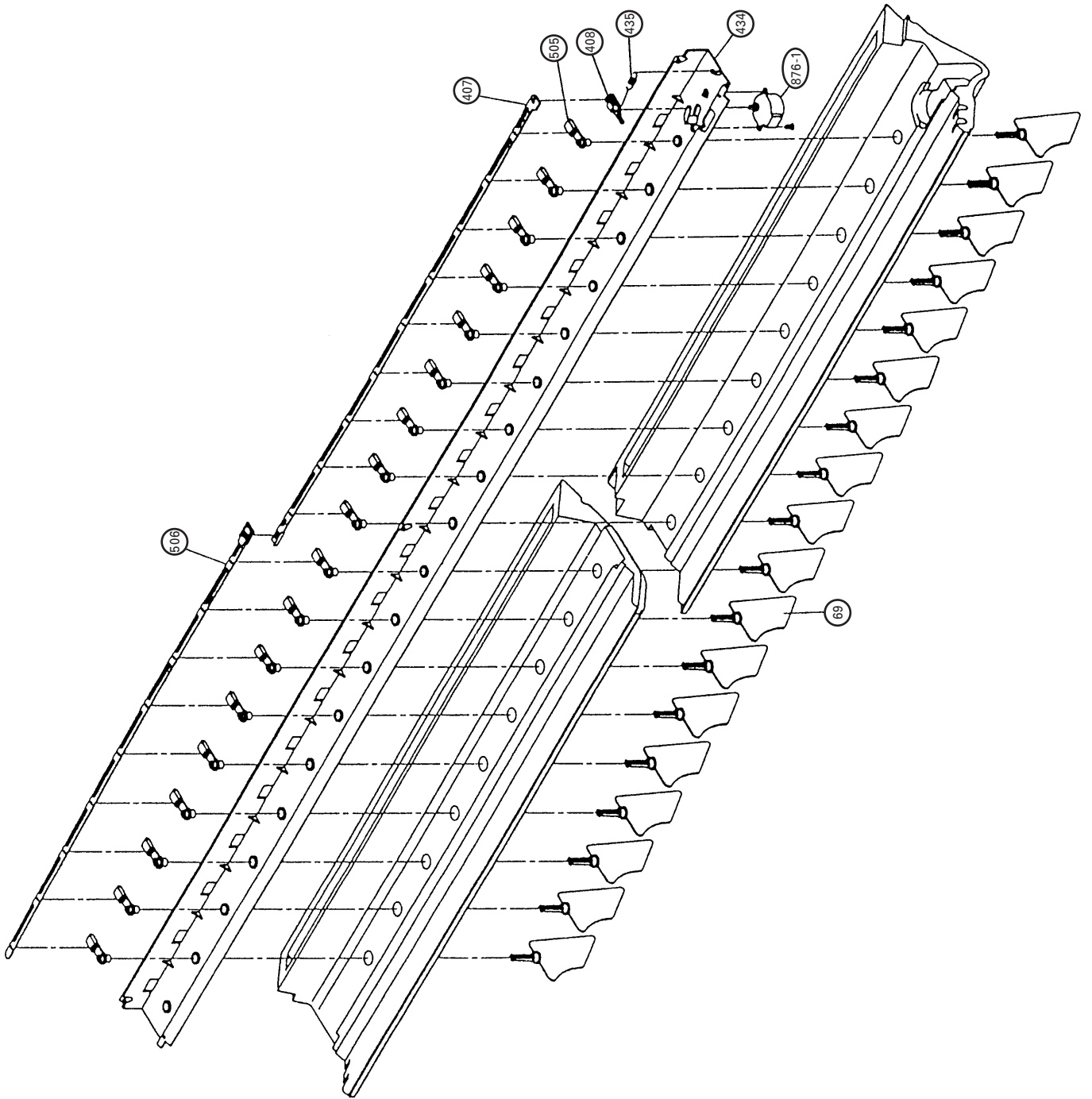
Jumper wire		Remote control unit signal selector switch
JM 2	JM 3	
Connect	Connect	A (Primary setting)
Connect	Disconnect	B
Disconnect	Connect	C
Disconnect	Disconnect	D

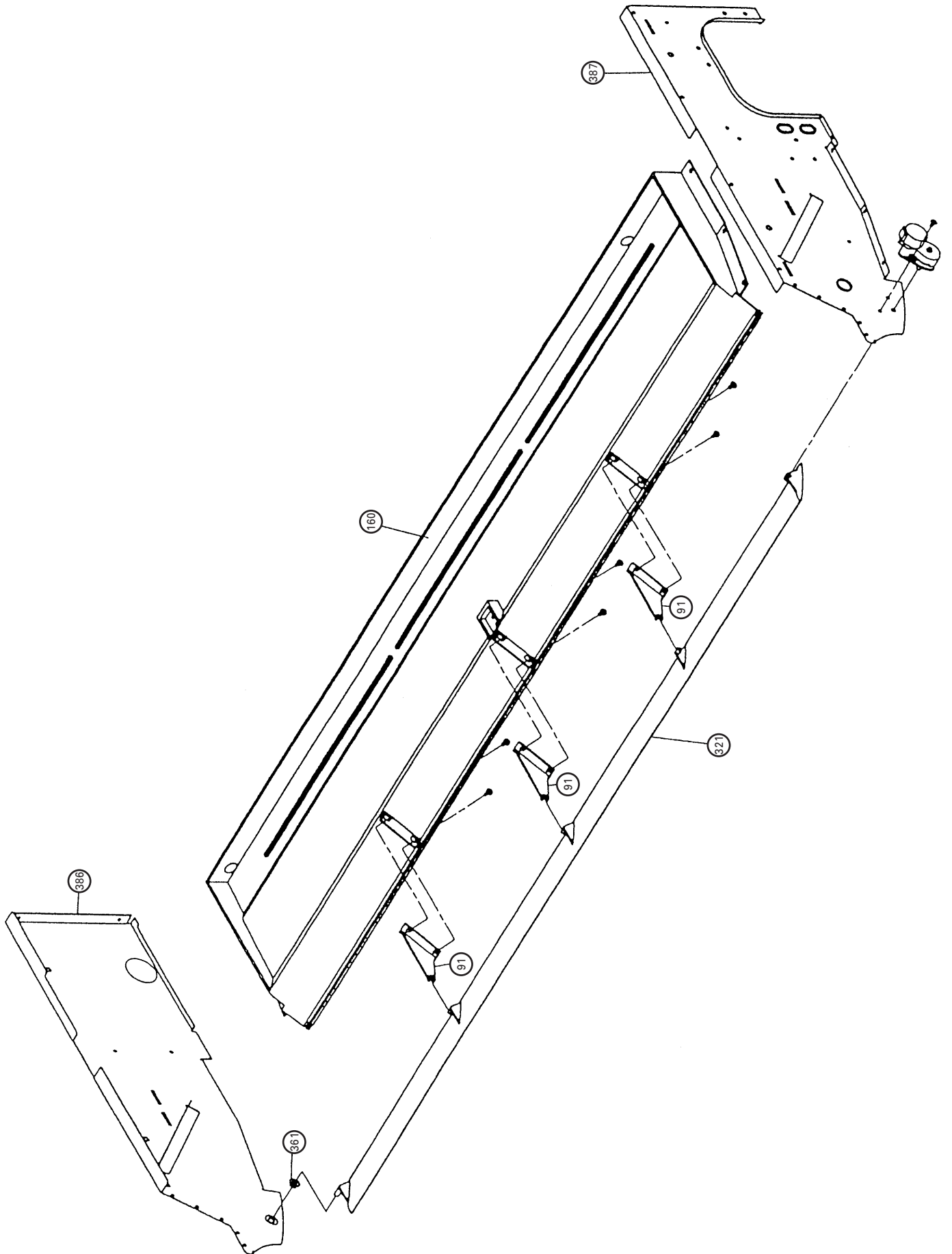
After setting the remote control unit signal selector switch, press the ACL button.

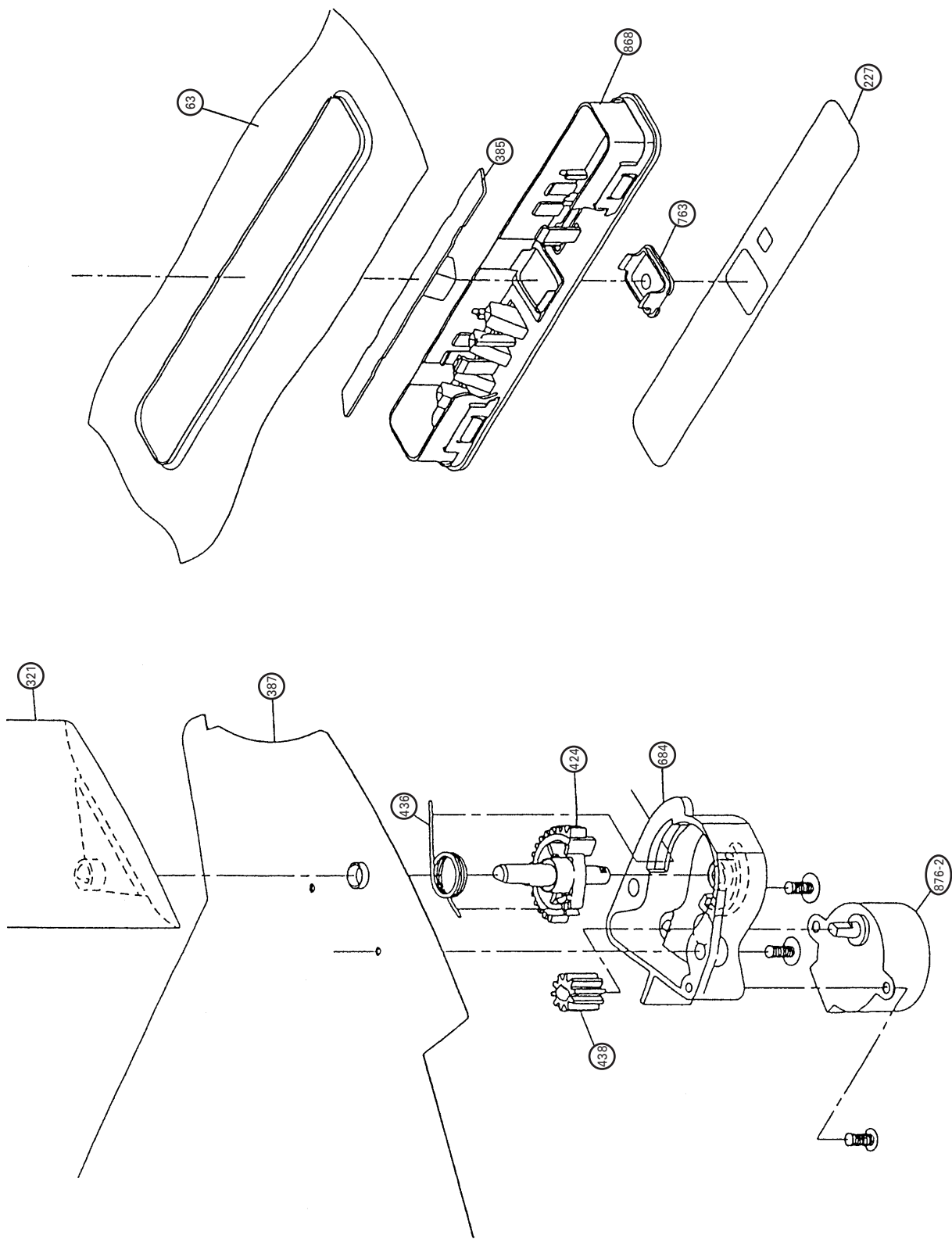
DISASSEMBLY ILLUSTRATION

Models : RY-36CA
RY-36HA

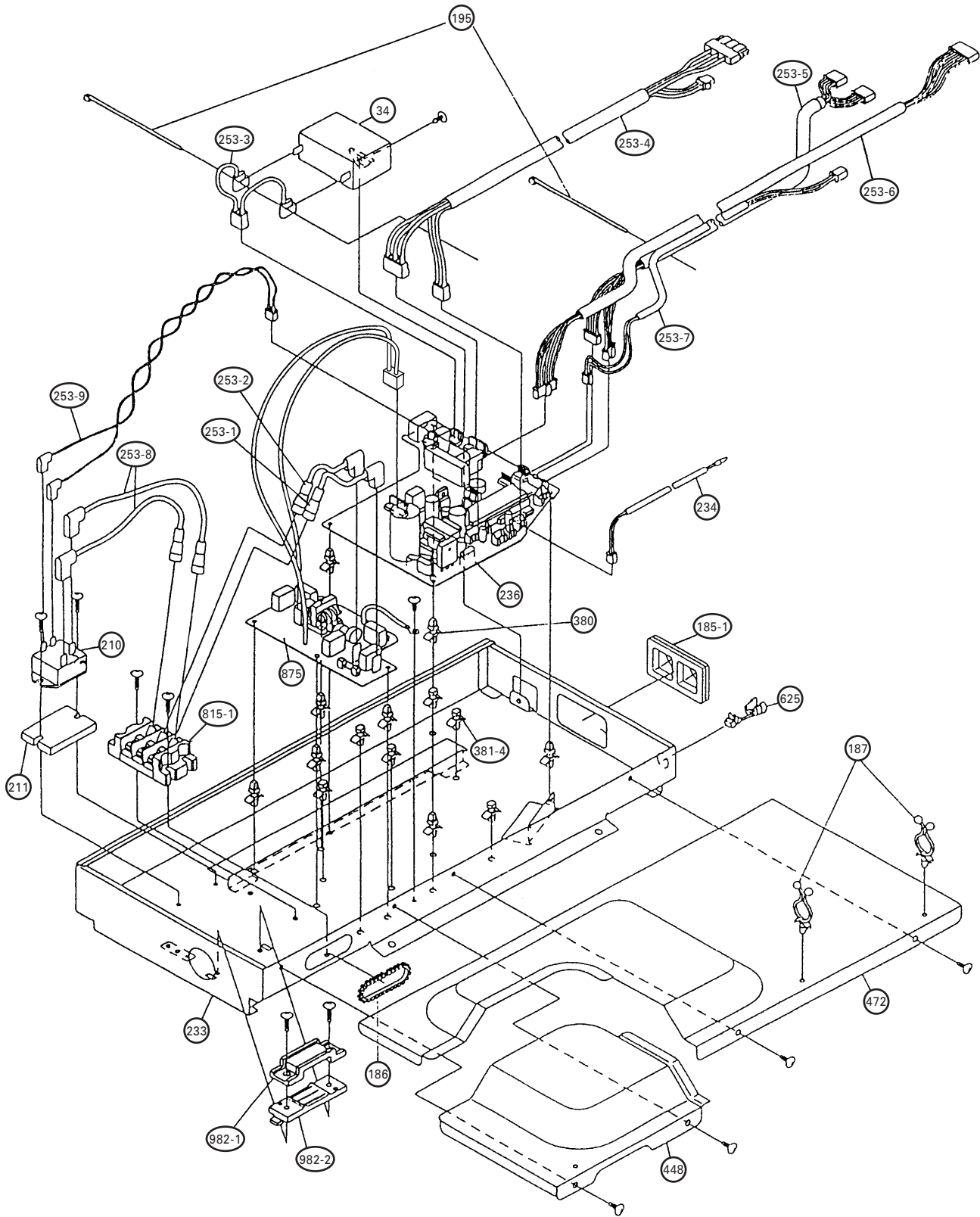




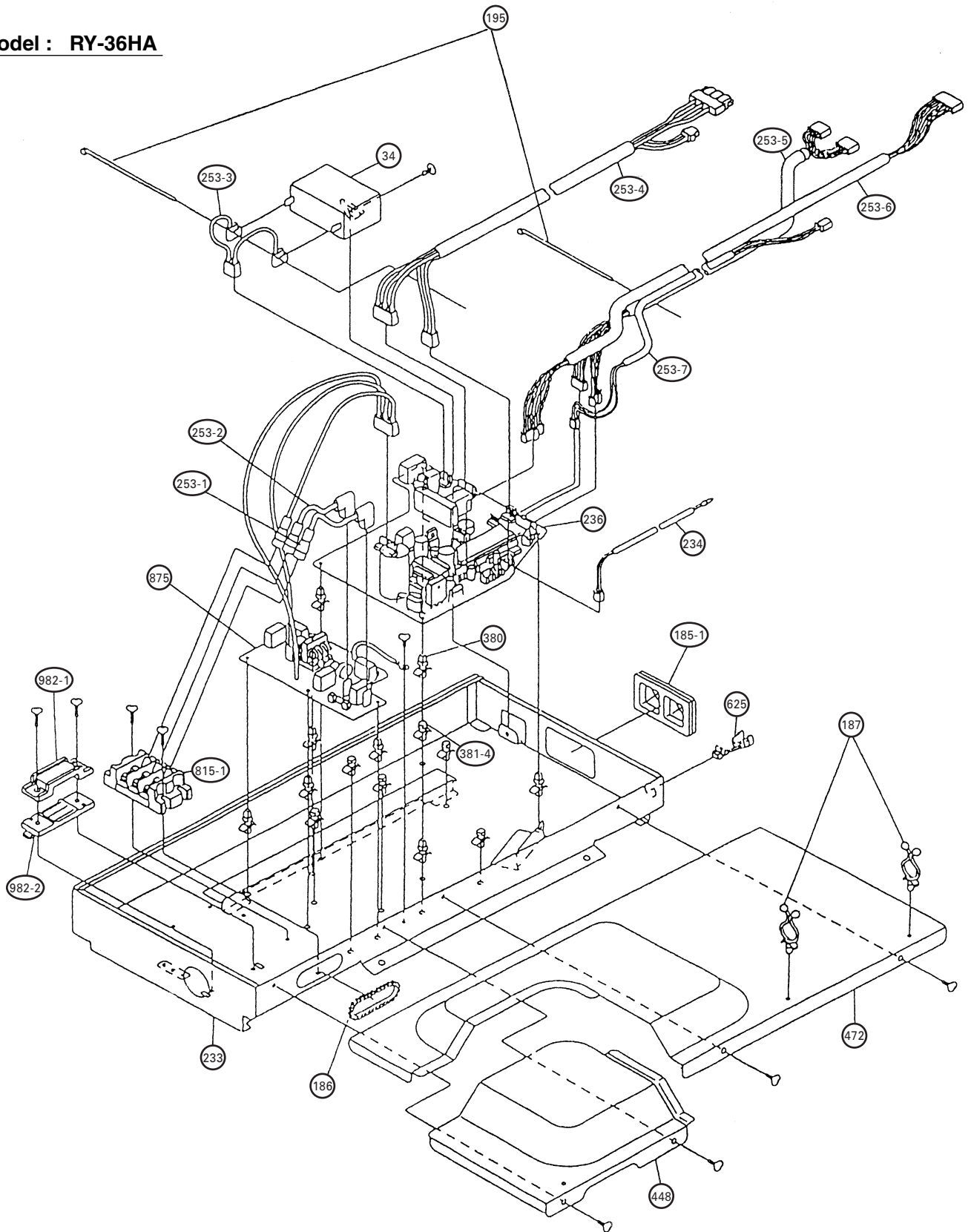




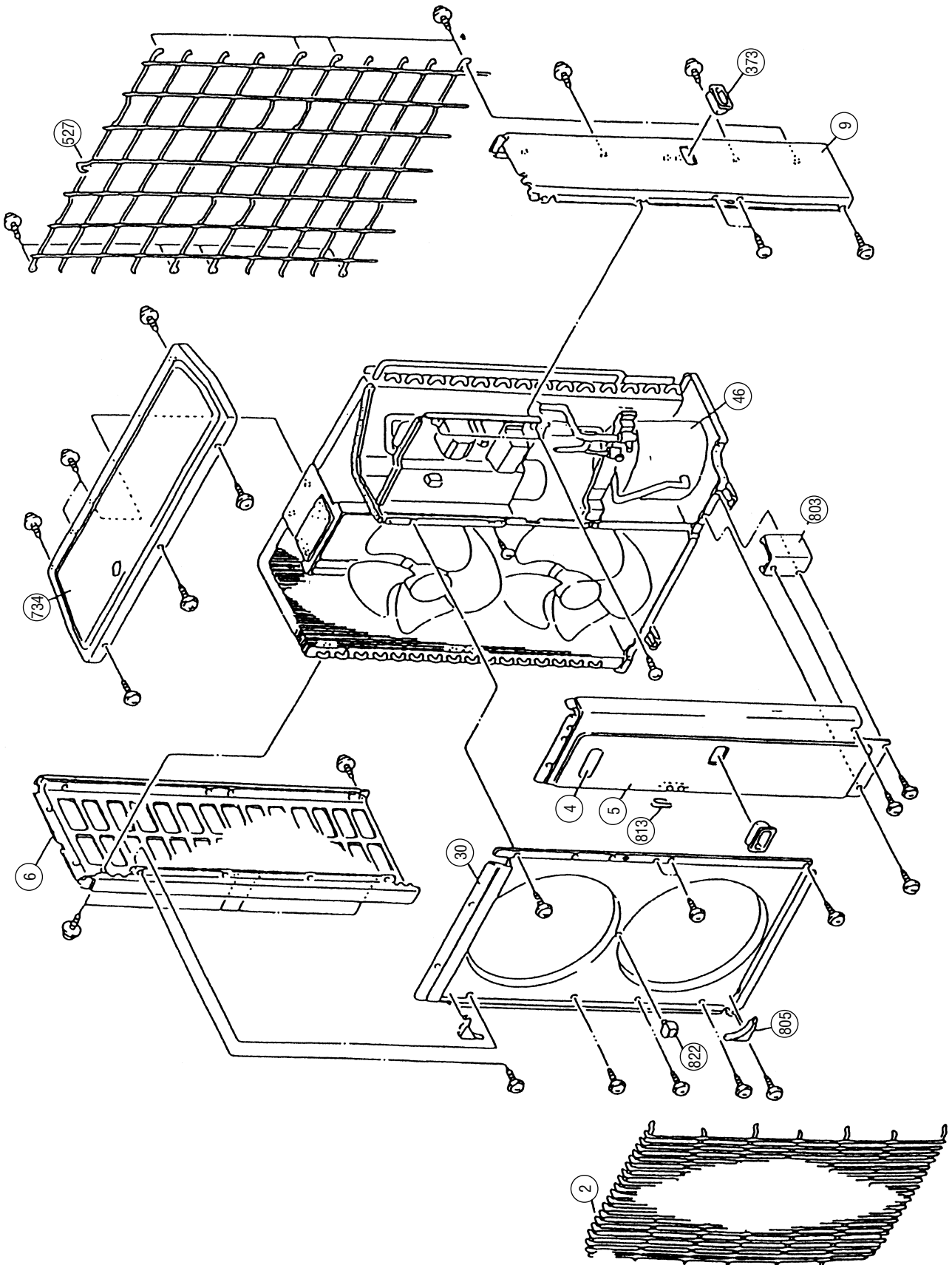
Model : RY-36CA



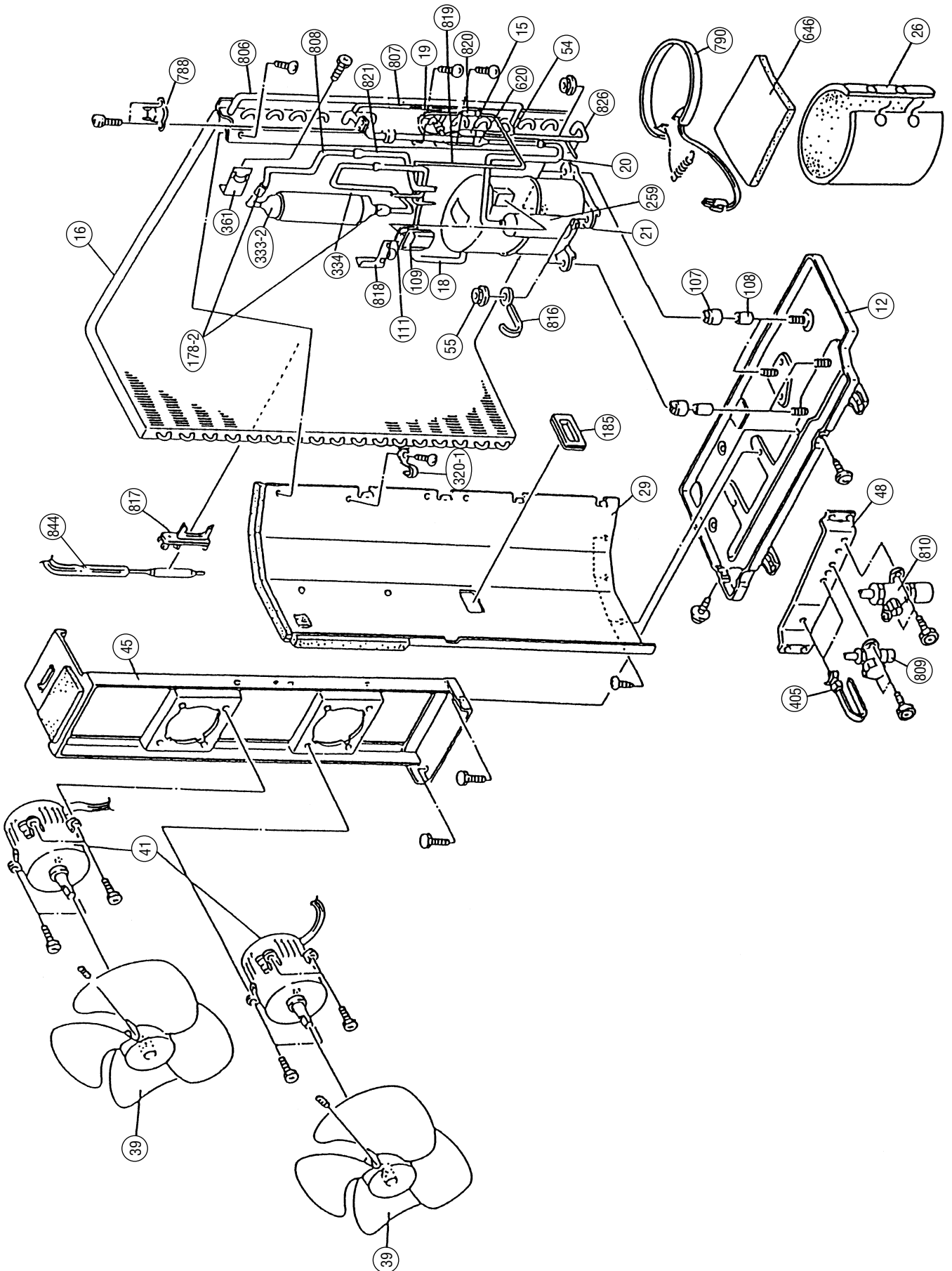
Model : RY-36HA



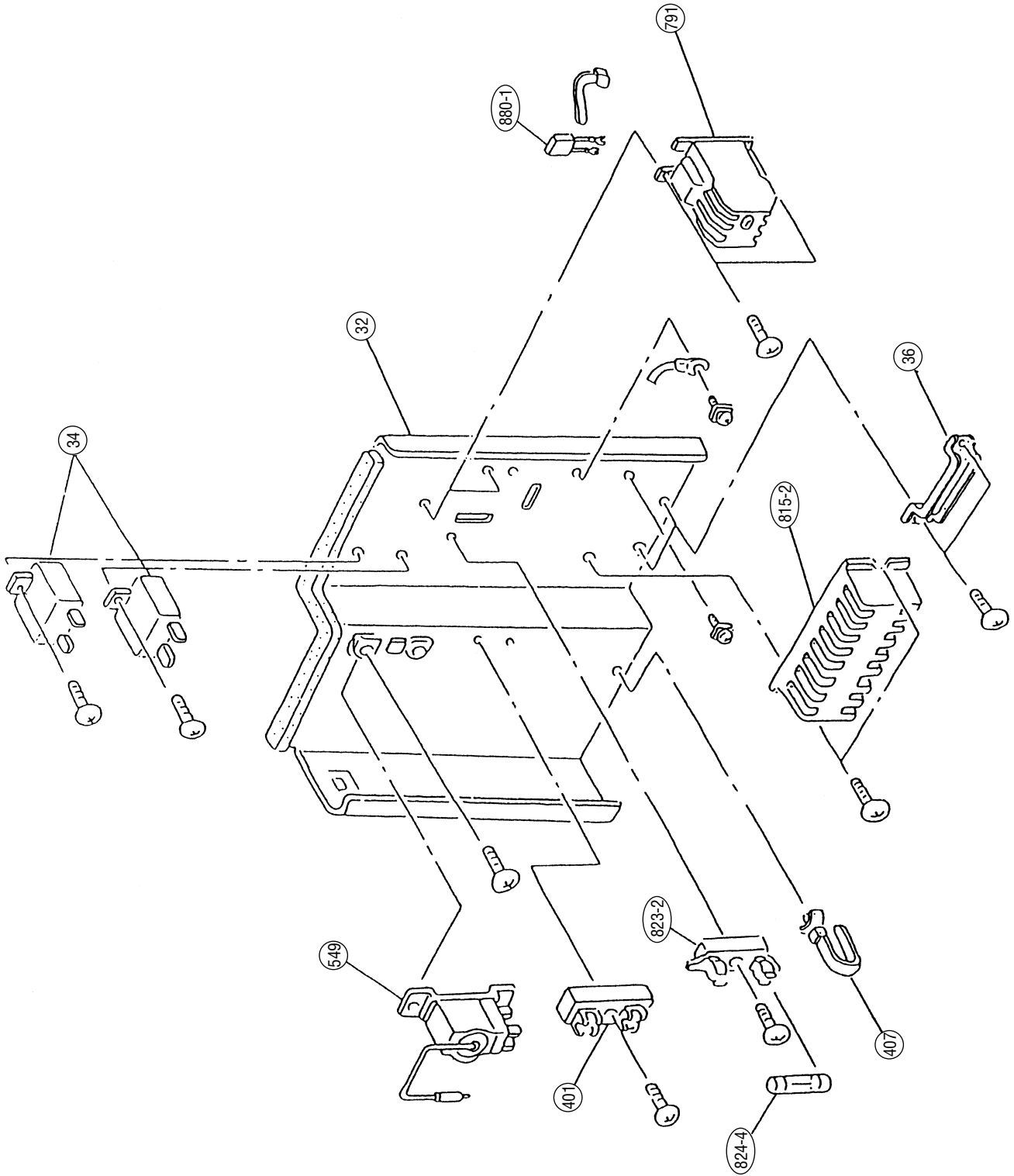
Models : RO-36CA
RO-36HA



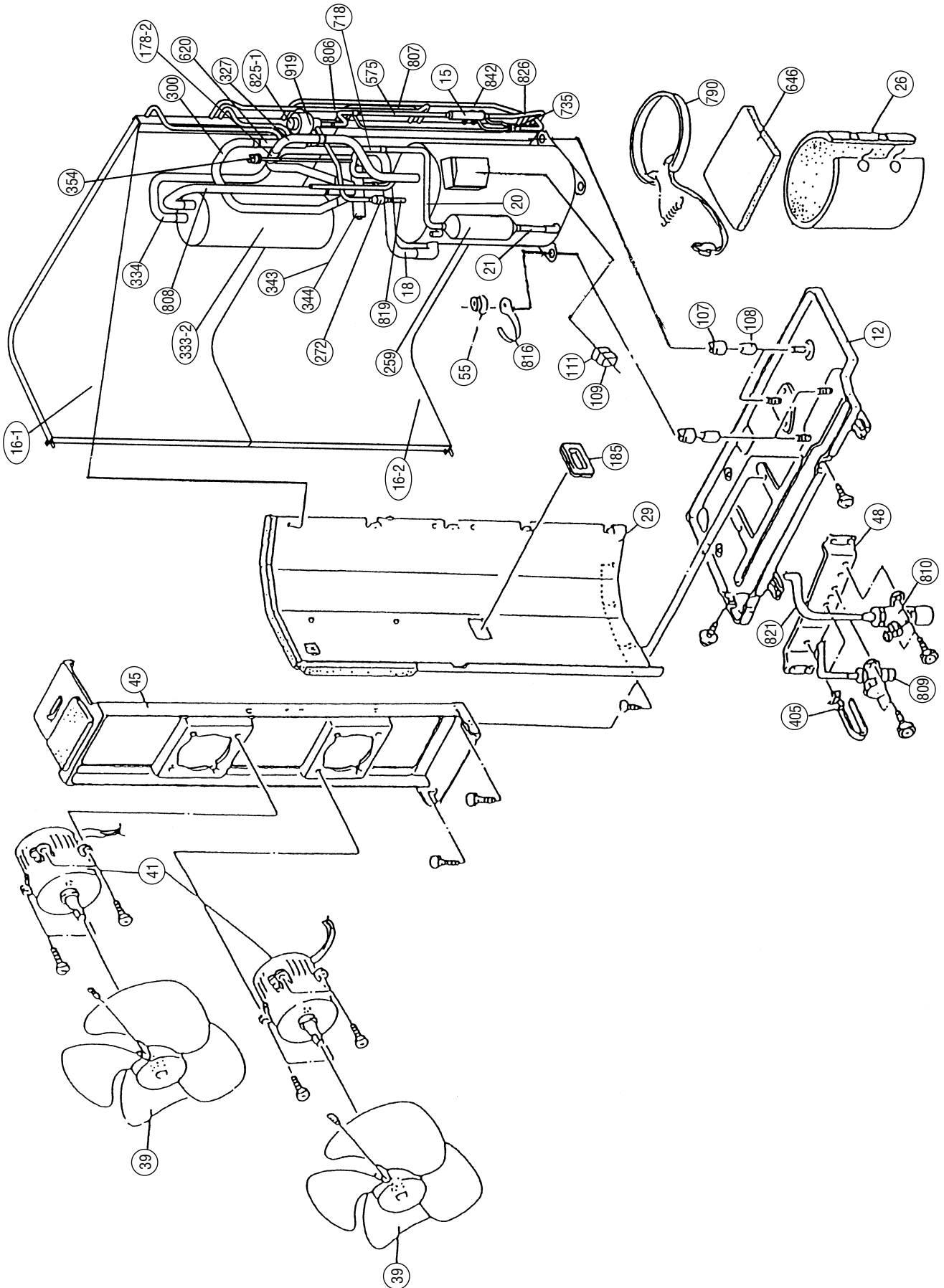
Model : RO-36CA



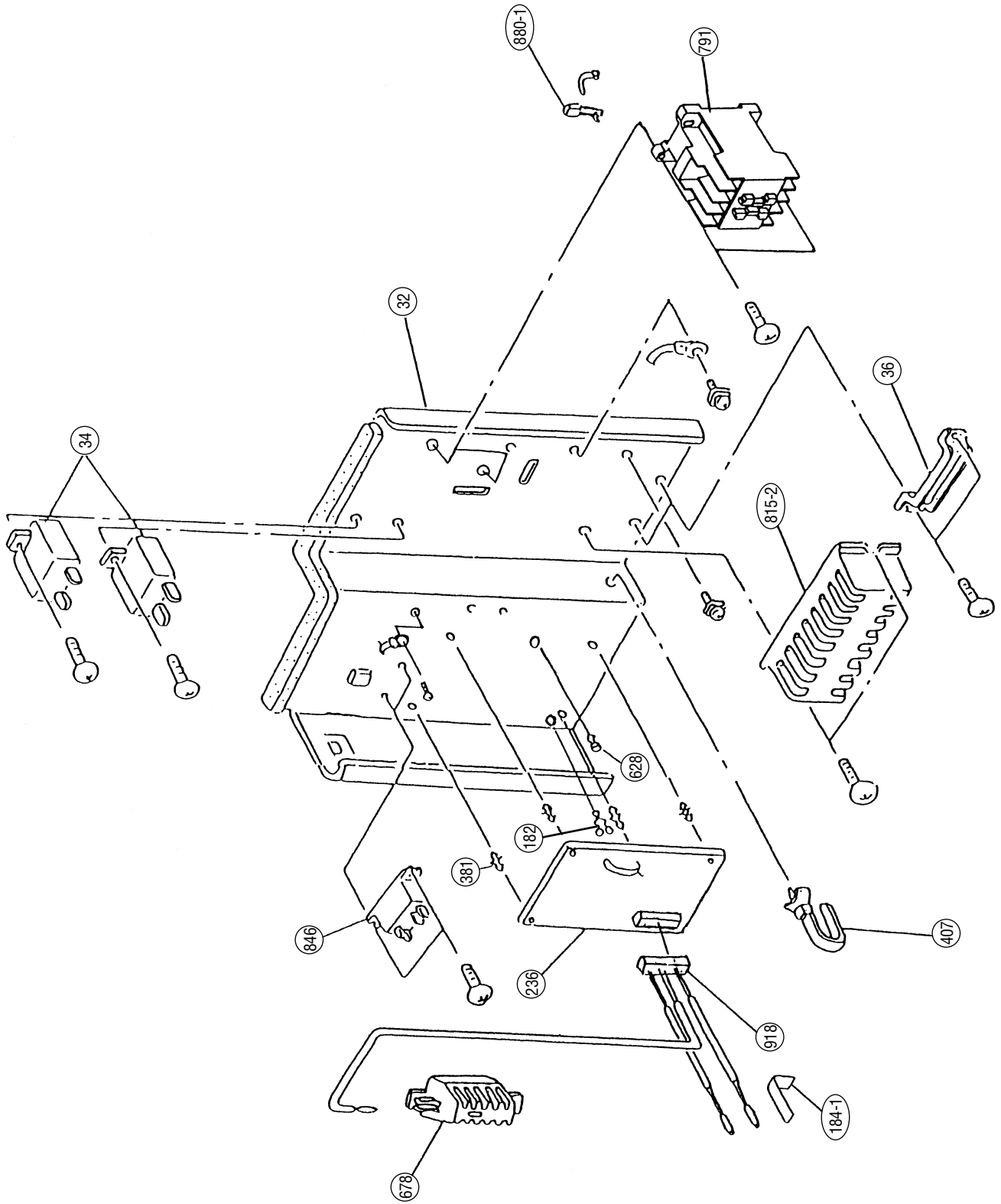
Model : RO-36CA



Model : RO-36HA



Model : RO-36HA



PARTS LIST

INDOOR UNIT

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	Ref. No.	Description	Part No.		Ord. Q'ty
		RY-36CA	RY-36HA				RY-36CA	RY-36HA	
8	Air Filter	9359739005	9359739005		338-2	Fixture (Motor)-B	9359703006	9359703006	
12	Base Assy	9359680000	9359680000		345-1	Filter Guide-R	9359692003	9359692003	
34	Capacitor (Fan Motor)	9703306068	9703306068		345-2	Filter Guide-L	9359693000	9359693000	
56	Sirocco Fan Assy	9359701002	9359701002		361	Bushing	9359733003	9359733003	
63	Panel (Front)	9359734000	9359734000		379	Hinge Plate (Grille)	9359694007	9359694007	
69	Louver	9359719007	9359719007		380	Locking Spacer KGLS-6S	313209391403	313209391403	
74	Intake Grille	9359738008	9359738008		381-4	Spacer	0600118075	0600118075	
91	Hinge	9359699002	9359699002		382	Cover (Decoration)-R	9359744009	9359744009	
109	Casing	9359704003	9359704003		383	Cover (Decoration)-L	9359745006	9359745006	
122	Shaft Holder-B	9357921006	9357921006		384	Shaft	9359707004	9359707004	
126	Motor Fixing Table	9359681007	9359681007		385	Indicator PCB Assy	9702260019	9702260019	
138	Separate Wall	9359700005	9359700005		386	Panel-L	9359685005	9359685005	
146	Evaporator Assy	9359696001	9359696001		387	Panel-R	9359683001	9359683001	
160	Drain Pan	9359698005	9359698005		388	Joint Assy	9359706007	9359706007	
164	Fan Motor Assy-IN	9360457004	9360457004		396	Reinforcement Metal	9359697008	9359697008	
174	Hanger	9359742005	9359742005		403	Shaft Holder Fixture	9359687009	9359687009	
181	Hole Cover	9359691006	9359691006		407	Motor Rod	9359723004	9359723004	
185-1	Rubber Bushing	9357376004	9357376004		408	Link (Louver)	9359726005	9359726005	
186	Edge Cover	9361049017	9361049017		424	Sector Gear	9359729006	9359729006	
187	Clamp No.1219	313361271706	313361271706		434	Base (Louver)	9359718000	9359718000	
195	Clamp SKB-100	313361275805	313361275805		435	Louver Spring	9359720003	9359720003	
210	Main Relay	9356781007	—		436	Flap Spring	9359730002	9359730002	
211	Cushion Rubber	313806328306	—		438	Pinion Gear	9359728009	9359728009	
227	Badge "FUJI ELECTRIC"	9359735045	9359735045		448	Control Box-B	9359713005	9359713005	
228	Insulation (Louver)-R	9359721000	9359721000		472	Control Box-A	9359712008	9359712008	
229	Insulation (Louver)-L	9359722007	9359722007		505	Louver Stopper	9359724001	9359724001	
233	Control Box Assy	9359708001	9359708001		506	Louver Rod	9359725008	9359725008	
234	Thermistor Assy	9703299025	9703299025		580	Top Cover	9359737001	9359737001	
236	Controller PCB Assy	9701941186	9704027054		625	Cord Bushing	9359240006	9359240006	
240	Remote Control Unit	9359913061	9359913054		684	Motor Base	9359727002	9359727002	
240-1	Cover Panel (Pipe)-L	9359690009	9359690009		735	Distributor Assy	9360455000	9360455000	
240-2	Cover Panel (Pipe)-R	9359689003	9359689003		743	Remote Control Holder Case	9359955016	9359955016	
253-1	Wire Assy (Connector)	9702321017	9702321017		752	Bracket Panel (Pipe)	9359688006	9359688006	
253-2	Wire Assy (Connector)	9702322014	9702322014		755	Casing Cover	9359705000	9359705000	
253-3	Wire Assembly	9702311018	9702311018		761	Side Cover-R	9359740001	9359740001	
253-4	Wire Assy (Connector)	9702323011	9702323011		762	Side Cover-L	9359741008	9359741008	
253-5	Wire Assy (Connector)	9702319014	9702319014		763	Receiver Cover	9359714002	9359714002	
253-6	Wire Assy (Connector)	9702317010	9702317010		815-1	Terminal-3P	9358660027	9358660027	
253-7	Wire Assy (Connector)	9702318017	9702318017		868	PCB Holder	9359736004	9359736004	
253-8	Wire Assy (Connector)	9702066055	—		875	Filter PCB Assy	9702275013	9703583032	
253-9	Wire Assembly	9702309015	—		876-1	Step Motor-H	9360479013	9360479013	
286	Bracket (Bearing)	9359686002	9359686002		876-2	Step Motor-V	9360307026	9360307026	
321	Flap Assy	9359731009	9359731009		982-1	Cord Clamp-A	9359820017	9359820017	
329	Coupling Pipe Assy	9360456007	9360456007		982-2	Cord Clamp-B	9359821014	9359821014	
338-1	Fixture (Motor)	9359702009	9359702009						

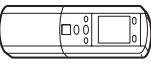



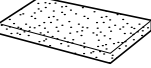



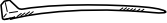


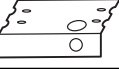

OUTDOOR UNIT

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



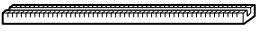

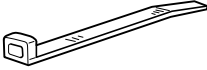

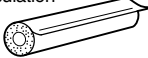



Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		RO-36CA	RO-36HA				RO-36CA	RO-36HA	
2	Fan Cover	9352159015	9352159015		361	Accumulator Support	9355351003	—	
4	Emblem-Rear	9361328006	9361328006		373	Grip	9352157004	9352157004	
5	Cabinet-A, Painted	9352146015	9352146015		381	Locking Spacer	—	313209391506	
6	Cabinet-C, Painted	9352149016	9352149016		401	Terminal-2P	9701971015	—	
9	Cabinet-B, Painted	9352147012	9352147012		405	Clamp No.1763	313816345304	313816345304	
12	Base Assy, Painted	9352136016	9352136016		407	Clamp (Cable) No.1259	313739340109	313739340109	
15	Dryer	9368113032	9368111014		527	Protection Net	9352163012	9352163012	
16	Condenser Assy	9352128011	—		549	Thermostat-Outdoor	9352426001	—	
16-1	Condenser-A Assy	—	9353023001		575	Condensing Pipe-C	—	9363466003	
16-2	Condenser-B Assy	—	9353024008		620	Inlet Pipe (Cond.) Assy	9355316019	9352741005	
18	Suction Pipe	9368087005	9368087005		628	Locking Spacer-B	—	313005446558	
19	Capillary Tube	9352439001	—		646	Compressor Cover-B	313986355101	313986355101	
20	Discharge Pipe	9368089009	—		678	Bracket (Thermistor)	—	313557406106	
20	Discharge Pipe Assy	—	9368209001		718	Discharge Pipe-C Assy	—	9363767001	
21	Discharge Pipe-B	9353209009	9353209009		734	Cabinet Top Plate	9352161018	9352161018	
26	Compressor Cover-A	9368090012	9368090012		735	Distributor Assy	—	9354119000	
29	Separate Wall Assy	9358705018	9358705018		788	Thermostat-Overheat	9354061002	—	
30	Blower Cover, Painted	9352151019	9352151019		790	Belt Heater	9361140103	9361140103	
32	Control Box Metal	9352134012	9352134012		791	Magnetic Relay	9363277005	9363277005	
34	Capacitor (Fan Motor)	9357965024	9357965024		803	Cabinet-D, Painted	9352150012	9352150012	
36	Cord Holder Metal	9356934007	9356934007		805	Blower Cover Corner	9352160011	9352160011	
39	Propeller Fan Assy	9300855013	9300855013		806	Cond. Pass Pipe-A	9352294006	—	
41	Fan Motor Assy-Out	9600832028	9600832028		806	Cond. Pass Pipe-A Assy	—	9355736008	
45	Bracket (Motor) Assy	9352141003	9352141003		807	Cond. Pass Pipe-B	—	9354112001	
46	Compressor Assy	9368020002	9368020002		807	Cond. Pass Pipe-B Assy	9353090010	—	
48	Bracket (Coupler) Assy	9355281010	9355281010		808	Inlet Pipe (Accum.) Assy	9352556005	9363464009	
54	Condensing Pipe-A	9352296000	—		809	Ball Valve-A	9357976006	9357976006	
55	Special Nut M8	313252257701	313252257701		810	Ball Valve-B	9357982007	9357982007	
107	Rubber Seat-A	9368293017	9368293017		813	Cabinet Hook	9352148002	9352148002	
108	Sleeve-A	9351875046	9351875046		815-2	Terminal 8P	9363276022	9363276022	
109	Terminal Cover	9351875053	9351875053		816	Wire Clamp Metal	313584219902	313584219902	
111	Terminal Packing	9351875060	9351875060		817	Thermostat Fixture	9352164019	—	
178-2	Capillary Holder Rubber	313394274808	313394274808		818	Accumulator Support-B	9355350006	—	
182	Clamp No.249	—	313361271505		819	Joint Pipe (Valve-A)	9352298004	9363457001	
184-1	Thermo. Spring-A	—	313728262708		820	Joint Pipe (Capillary)	9352299001	—	
185	Rubber Bushing	313005066051	313005066051		821	Joint Pipe (Valve-B)	9352284007	9352284007	
236	Controller PCB Assy	—	9703230059		822	Fan Cover Fixture-A	9352158018	9352158018	
259	Muffler	9368082000	9368082000		823-2	Fuse Holder	0500063024	—	
272	Strainer Assy	—	9354139008		824-4	Fuse	0600222529	—	
300	Suction Pipe-C	—	9352759000		825-1	Expansion Valve Assy	—	9363454017	
320-1	Wire Clamp Metal	313483219905	—		826	Condensing Pipe-B	9352297007	9363485006	
327	Suction Pipe-A	—	9352754005		842	Cond. Pass Pipe-C	—	9354111004	
333-2	Accumulator (B)	9301942019	—		844	Wire Assy (Shield)-S	9352307010	—	
333-2	Accumulator Assy (B)	—	9362425001		846	Relay	—	9304375005	
334	Suction Pipe-B	9352557002	9352287008		880-1	Network (C-R)	9700987017	9700987017	
343	Solenoid Coil	—	9359616108		918	Thermistor Assy	—	9703129025	
344	4-Way Valve	—	9353055002		919	Expansion Valve Coil	—	9363467017	
354	Pressure Switch	—	9704045003						

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	RY-36CA	RY-36HA
Remote control unit 	1	Use for air conditioner operation	9359913023 (AR-DL6)	9359913016 (AR-DL5)
Battery (pen light) 	4	For remote control unit	313187358304	313187358304
Remote control unit holder 	1	For mounting the remote control unit	9359955016	9359955016
Tapping screw (ø3 x 12) 	3	For remote control unit holder	301141533125	301141533125
Drain hose insulation 	1	Adhesive type 70 x 230	9360464002	9360464002
VT wire 	1	For fixing the drain hose L 280 mm	313806350303	313806350303
Coupler heat insulator (large) 	2	For indoor side pipe joint (large pipe)	9350716029	9350716029
Coupler heat insulator (small) 	1	For indoor side pipe joint (small pipe)	9352766015	9352766015
Nylon fastener 	Large 4	For fixing the coupler heat insulator	9301501001	9301501001
	Small 4		312300787605	312300787605
Special nut A (large flange) 	4	For installing indoor unit	313005446653	313005446653
Special nut B (small flange) 	4	For installing indoor unit	313005446759	313005446759
Installation template 	1	For positioning the indoor unit	9360022004	9360022004
Auxiliary pipe assembly 	1	For connecting the piping	9360463005	9360463005

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	RO-36CA	RO-36HA
Power cap 	1	For power cord installation	9352173011	9352173011
Auxiliary pipe assembly 	1	For wiring conduit (gas side) connection (May not be supplied, depending on the model)	9355292016	9355292016
Edge cover 	1	For wiring conduit installation hole edge protection	9352436000	9352436000
Tapping screw 	2	• For cabinet A and cabinet D mounting (1)	301463040100	301463040100
Binder 	1	For power supply cord binding	313035356905	313035356905
Putty 	1	For sealing	303020200114	303020200114
Coupler heat insulation 	1	For outdoor side pipe joint	313005074759	313005074759
Pipe (drain) 	2	For outdoor unit drain piping work	—	313728031005
Flexible tube 	2		—	313013042915
Cap (drain) 	2		—	313166024302



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