

FUJI ELECTRIC

SPLIT TYPE ROOM AIR CONDITIONER WALL MOUNTED type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RSW-77	ROW-77
	RSW-77R	ROW-77R

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

TYPE		COOL	COOL & HEAT
INDOOR UNIT		RSW-77	RSW-77R
OUTDOOR UNIT		ROW-77	ROW-77R
COOLING CAPACITY	(kW)	1.95 - 1.95	2.00 - 1.95
HEATING CAPACITY	(kW)	—	2.30 - 2.20

ELECTRICAL SPECIFICATIONS

POWER SUPPLY	(V)	240 - 220	240 - 220
FREQUENCY	(Hz)	50	50
RUNNING CURRENT	(A)		
	COOLING	2.9 - 2.8	3.4 - 3.3
	HEATING	—	3.3 - 3.2
INPUT	(kW)		
	COOLING	0.635 - 0.590	0.74 - 0.70
	HEATING	—	0.74 - 0.68
EER	(kW/kW)		
	COOLING	3.07 - 3.31	2.70 - 2.79
	HEATING	—	3.11 - 3.24
MOISTURE REMOVAL	(ℓ/hr)	0.7	0.8
AIR CIRCULATION-Hi	(m ³ /hr)	365 - 345	345 - 325

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor		
CODE		80662745E 240-220V 50Hz	80679045Z 240-220V 50Hz
REFRIGERANT	R-22 (g)	700	650

FAN MOTOR

POWER SUPPLY	(V)	240 - 220	240 - 220
INDOOR UNIT	POWERFUL (r. p. m.)	1,340 - 1,300	—
	HI-SPEED (r. p. m.)	1,310 - 1,270	1,300 - 1,230
	MED-SPEED (r. p. m.)	1,200 - 1,100	1,210 - 1,100
	LO-SPEED (r. p. m.)	1,070 - 965	1,070 - 950
	SUPER QUIET (r. p. m.)	995 - 885	990 - 875
OUTDOOR UNIT	(r. p. m.)	800 - 770	800 - 770

DIMENSIONS

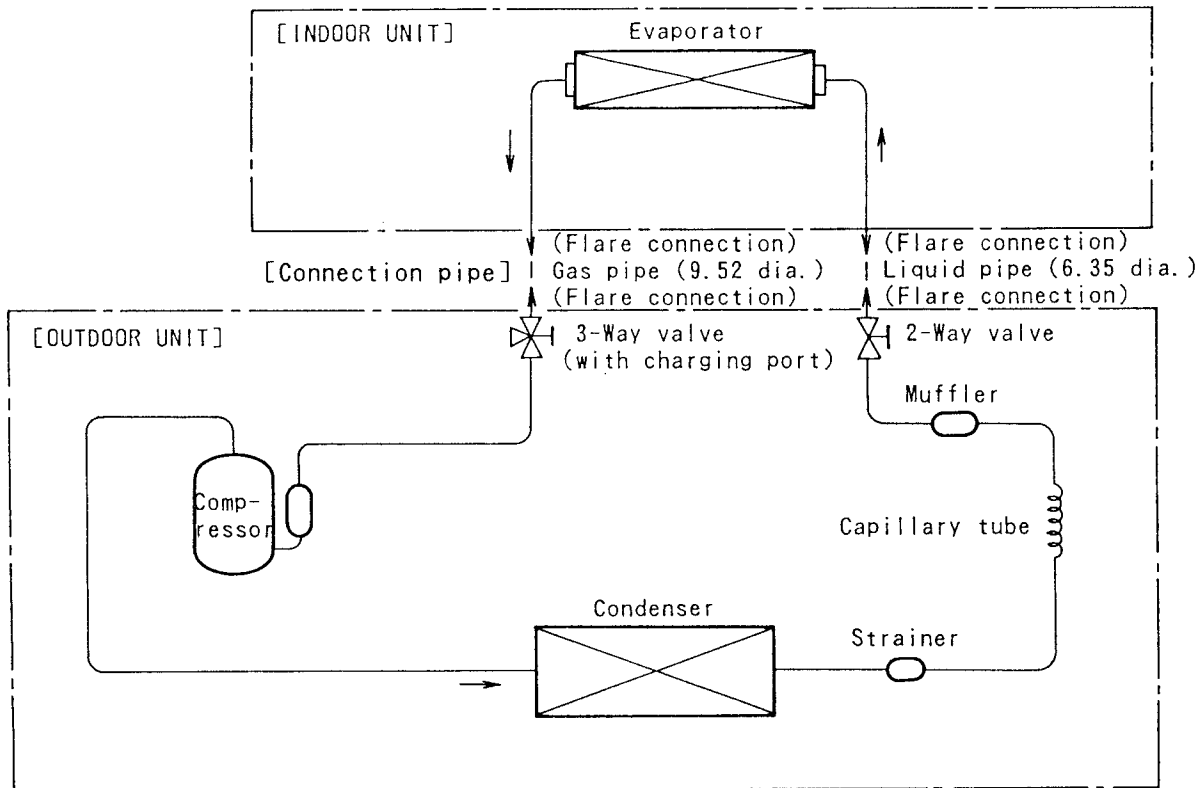
INDOOR UNIT	HEIGHT x WIDTH x DEPTH	245 mm x 815 mm x 160 mm	245 mm x 815 mm x 160 mm
OUTDOOR UNIT	HEIGHT x WIDTH x DEPTH	530 mm x 640 mm x 250 mm	530 mm x 640 mm x 250 mm

WEIGHT

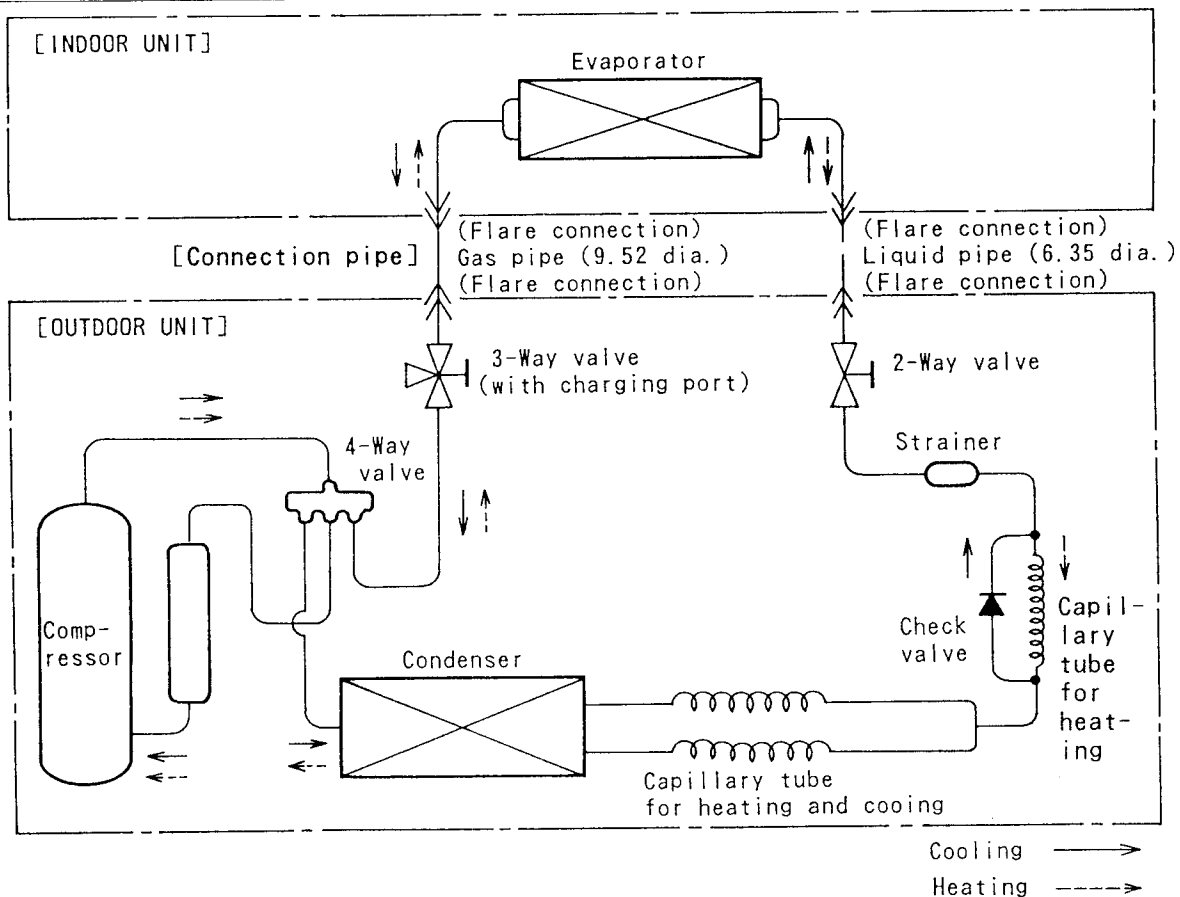
INDOOR UNIT	GROSS / NET (kg)	10 / 7.5	10 / 7.5
OUTDOOR UNIT	GROSS / NET (kg)	28 / 26	29 / 27

REFRIGERANT SYSTEM DIAGRAM

Models : RSW-77/ROW-77



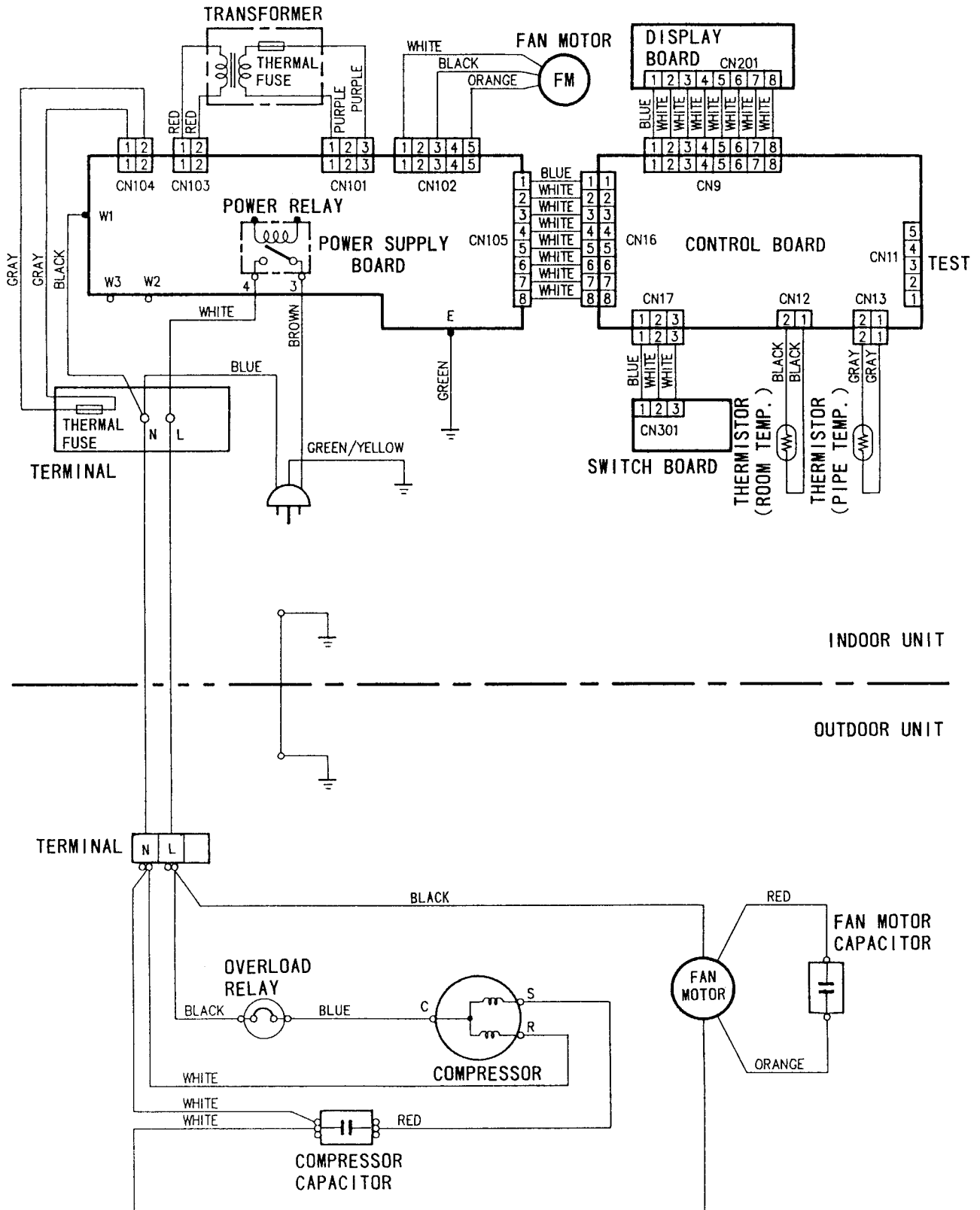
Models : RSW-77R/ROW-77R

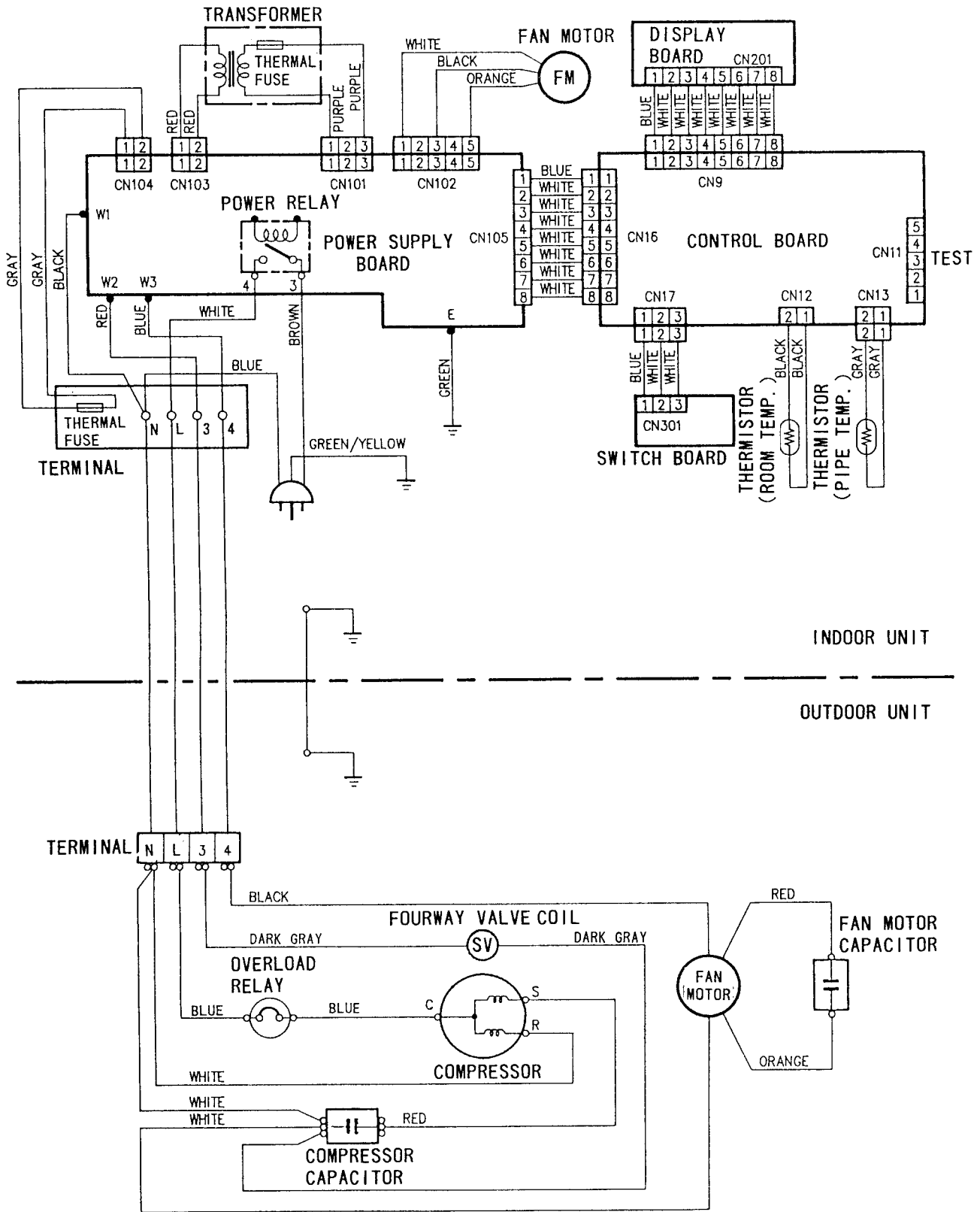


Cooling ———→
Heating - - - ->

C I R C U I T D I A G R A M

Models : RSW-77/ROW-77

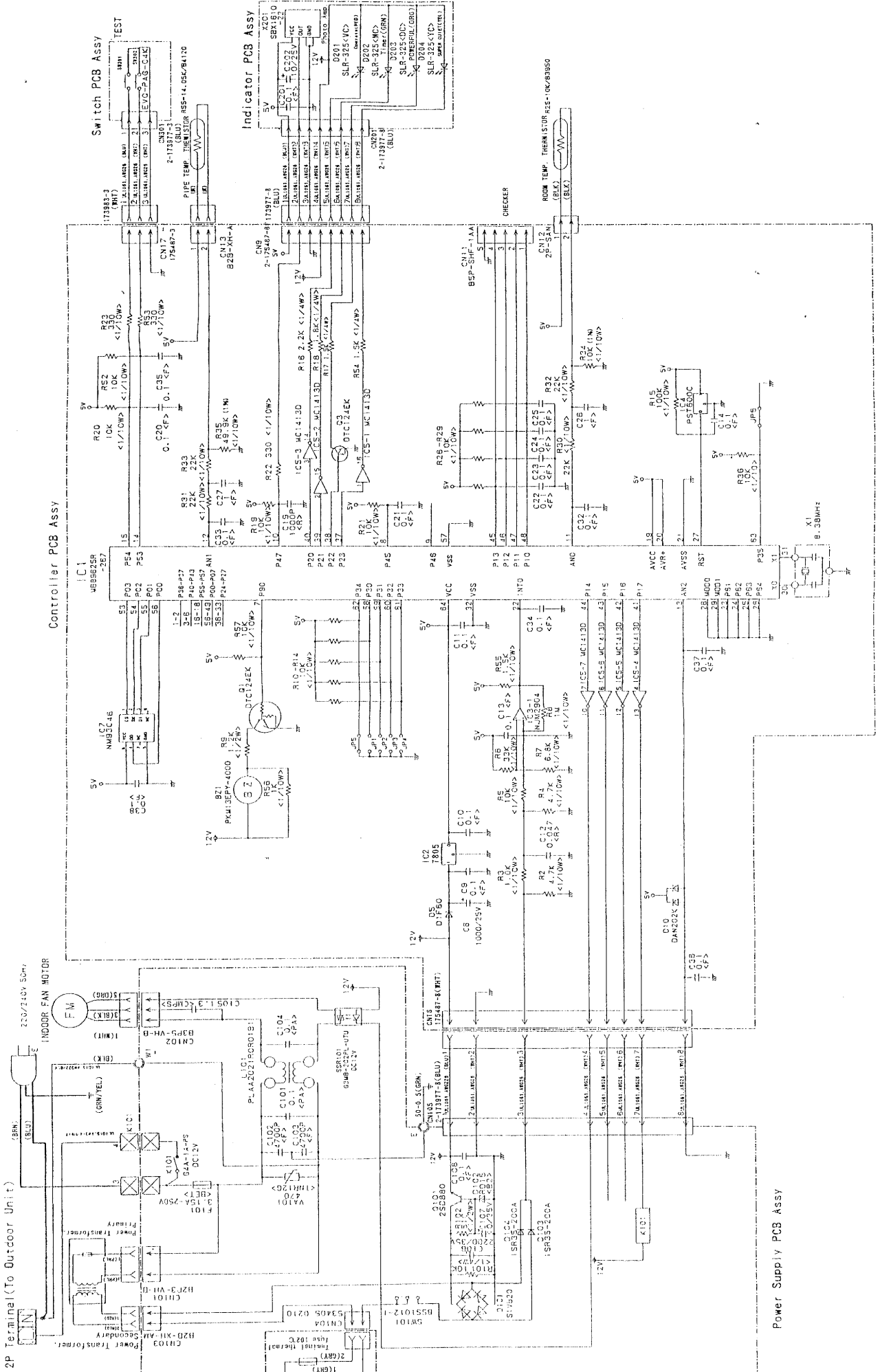




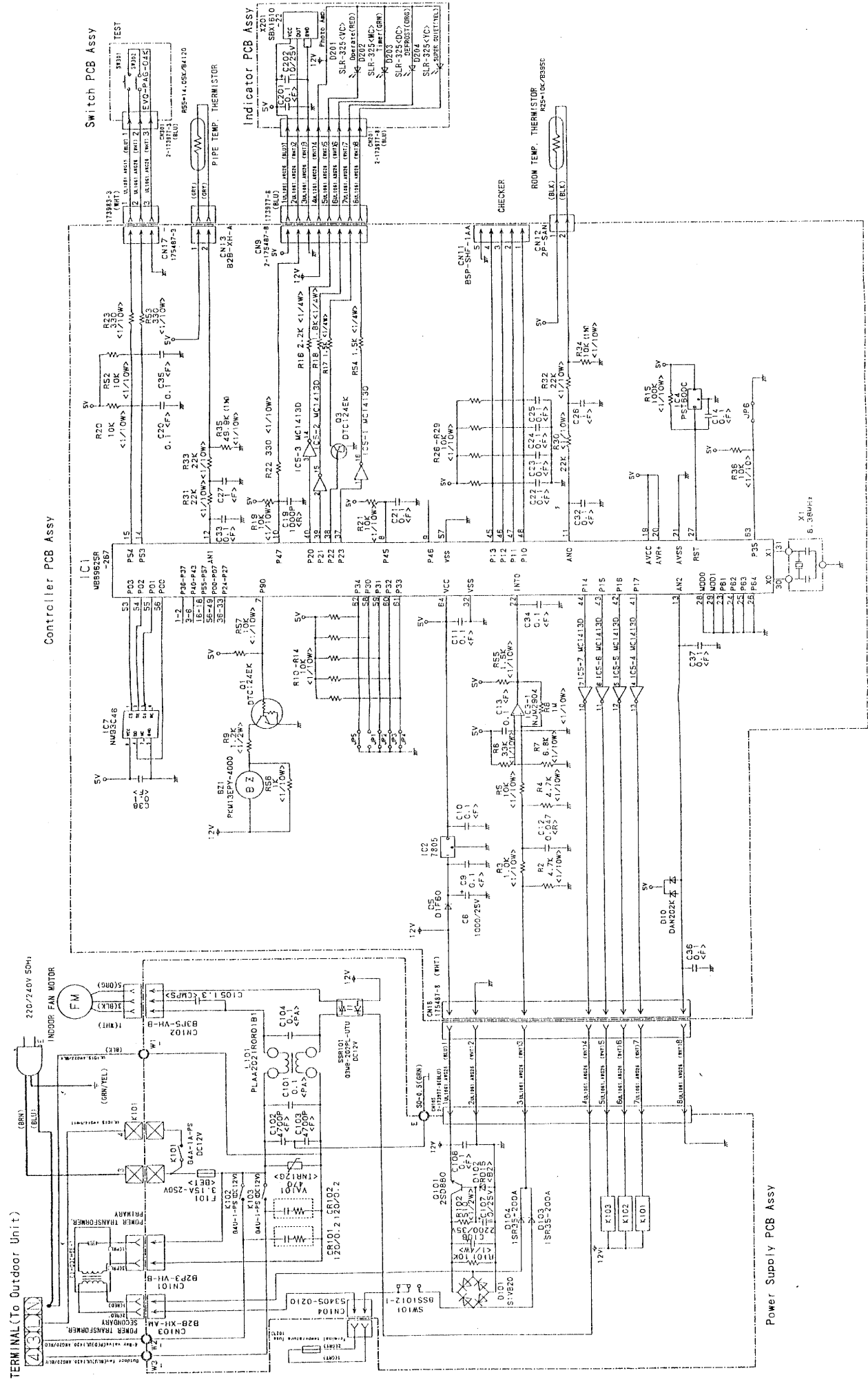
INDOOR PRINTED CIRCUIT BOARD

INDOOR PRINTED CIRCUIT DIAGRAM

Model: RSW-77

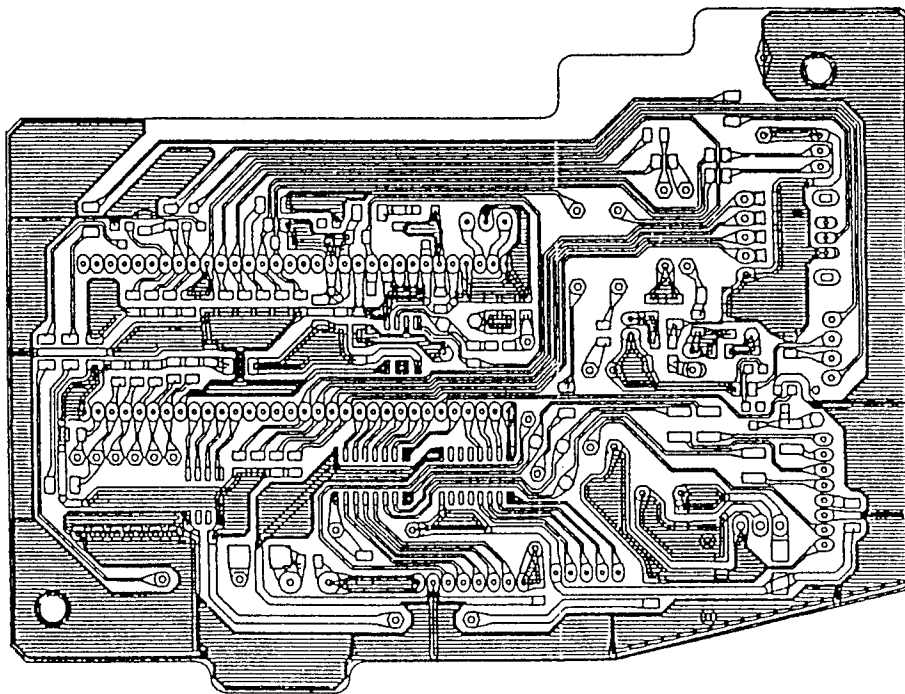
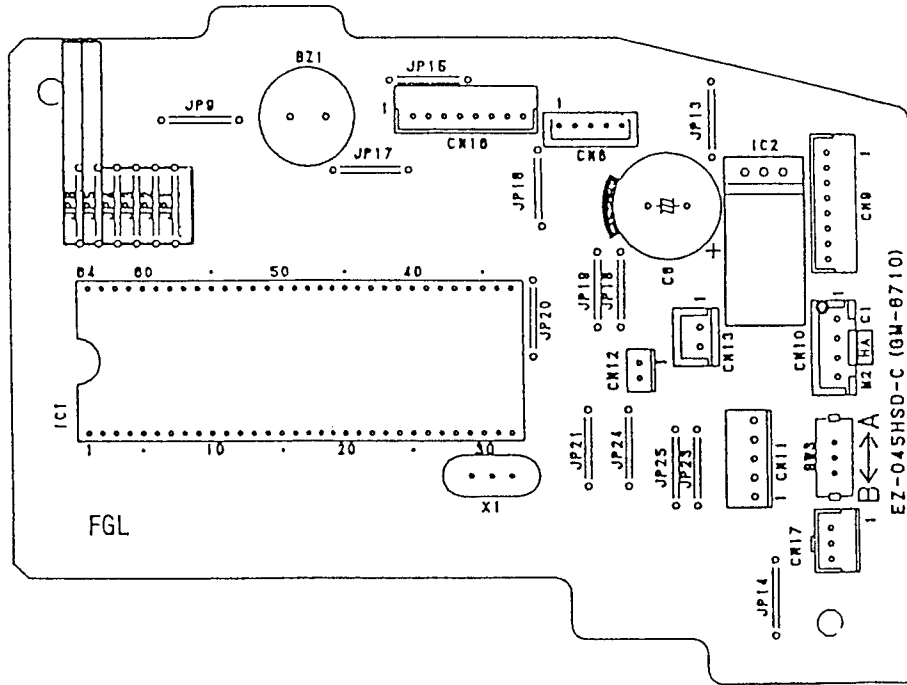


Model : RSW-77R



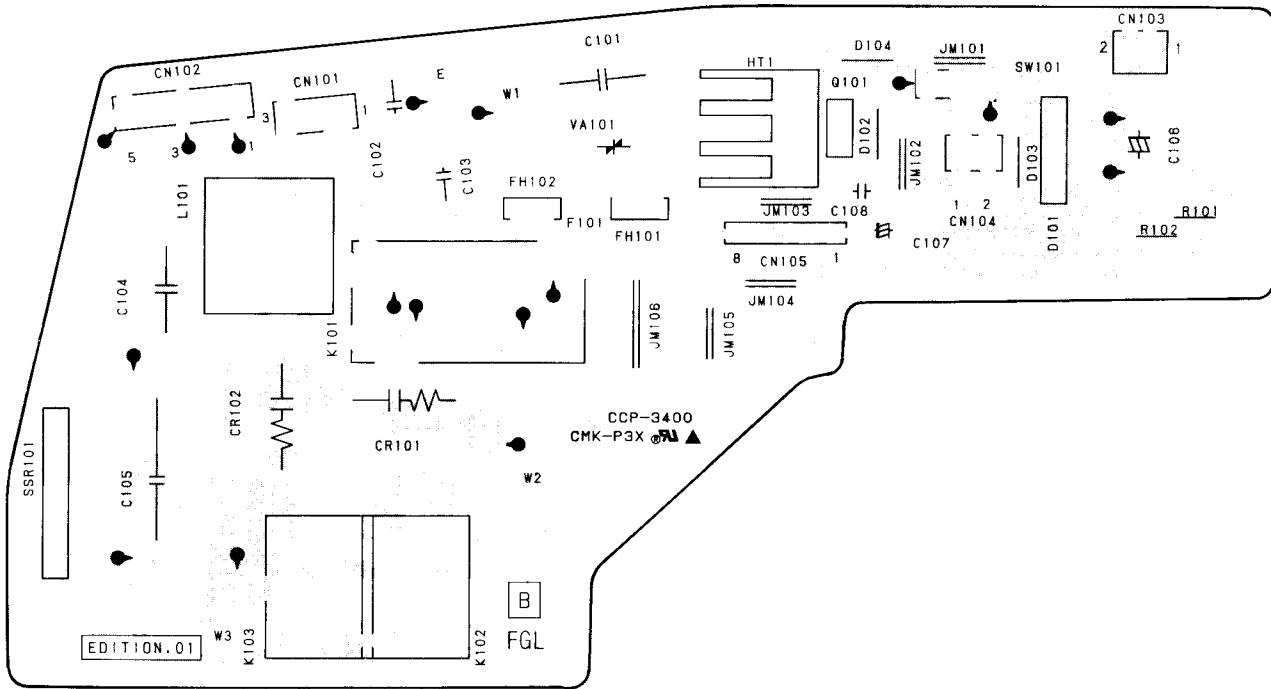
CONTROLLER P. C. BOARD OVERLAY

(VIEWED FROM THE SOLDER SIDE)



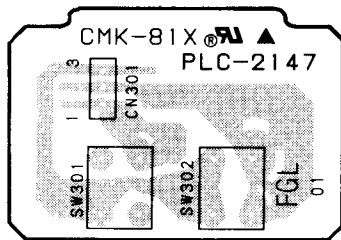
POWER SUPPLY P. C. BOARD OVERLAY

(VIEWED FROM THE SOLDER SIDE)



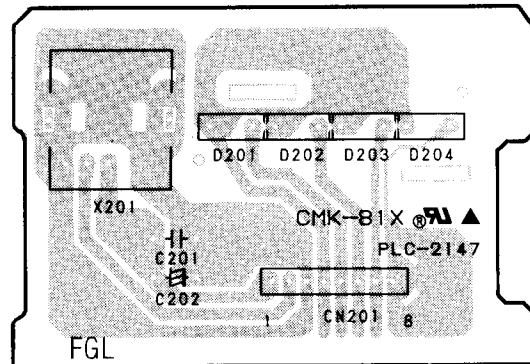
SWITCH P. C. BOARD OVERLAY

(VIEWED FROM THE SOLDER SIDE)



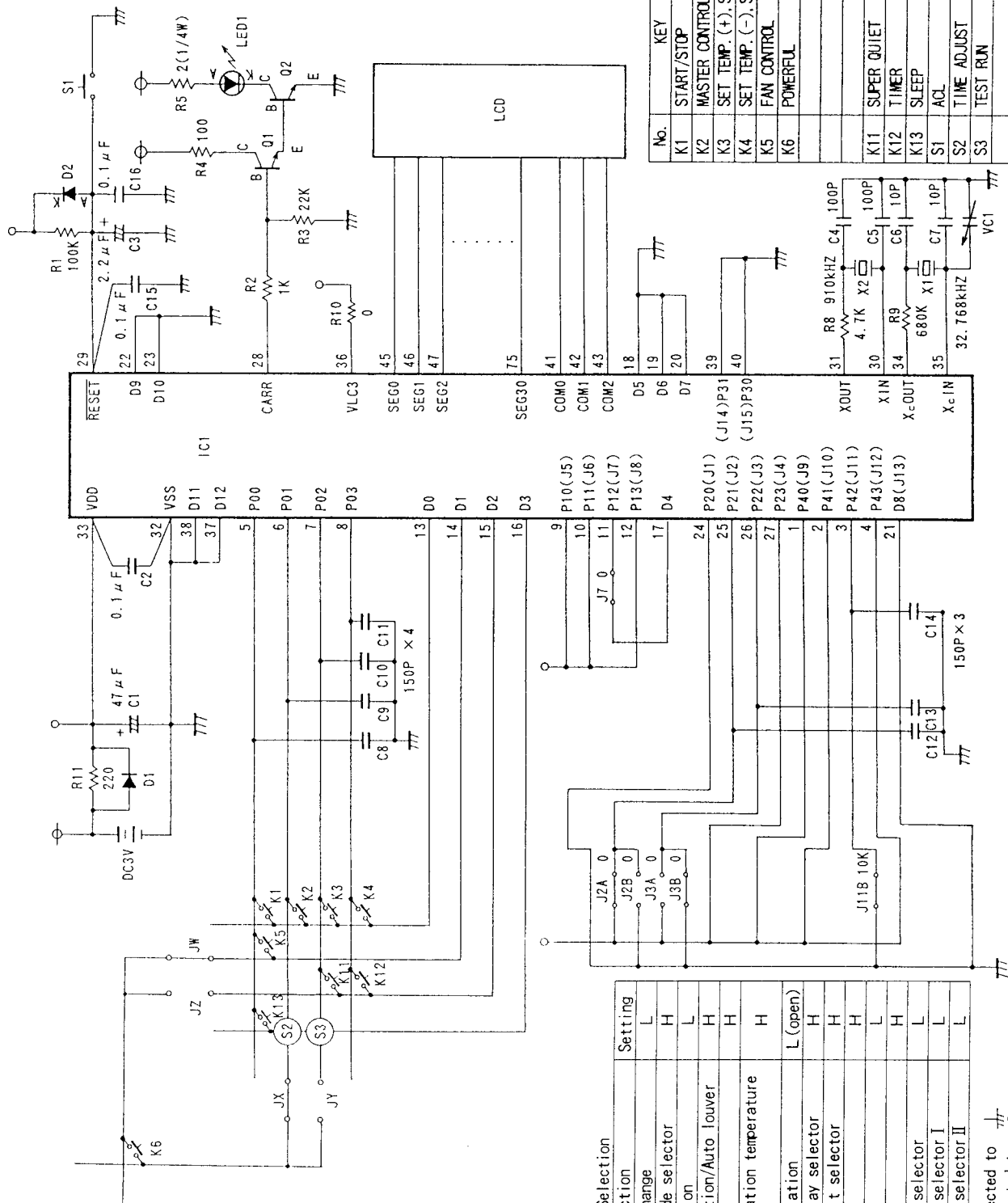
INDICATOR P. C. BOARD OVERLAY

(VIEWED FROM THE SOLDER SIDE)



REMOTE CONTROLLER CIRCUIT DIAGRAM

Model : RSW-77

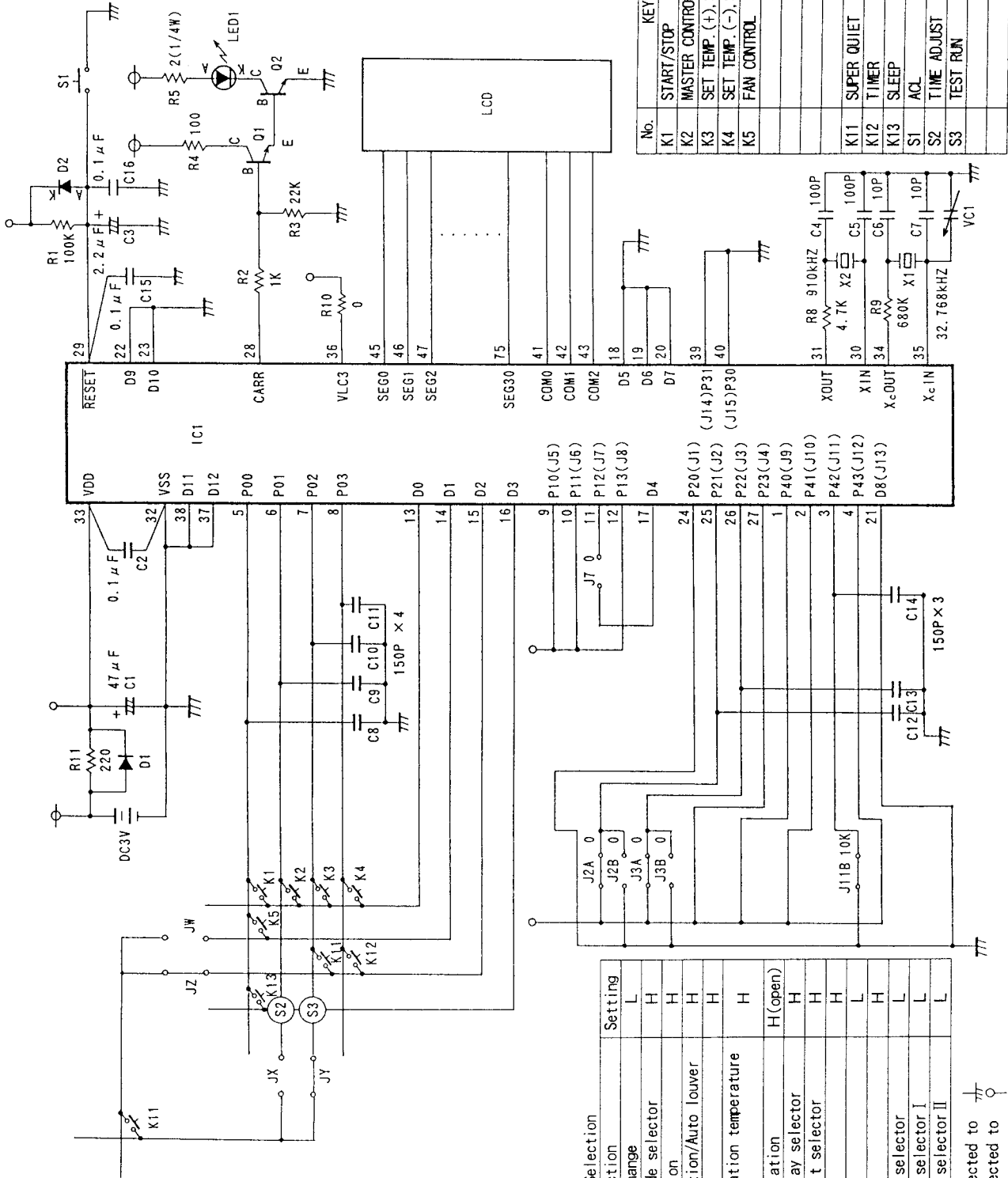


No.	KEY
K1	START/STOP
K2	MASTER CONTROL
K3	SET TEMP. (+), SET TIME(+)
K4	SET TEMP. (-), SET TIME(-)
K5	FAN CONTROL
K6	POWERFUL
K11	SUPER QUIET
K12	TIMER
K13	SLEEP
S1	ACL
S2	TIME ADJUST
S3	TEST RUN

No.	Jumper Wire Function Selection	Setting
J1	Timer button change	L
J2	Transmitter code selector	H
J3	Heating operation	L
J4	Air flow direction/Auto louver	H
J5	Dry operation	H
J6	Automatic operation temperature indication	H
J7	Fan mode/Circulation	L (open)
J8	24Hr/12Hr display selector	H
J9	Temperature unit selector	H
J10	Fan mode	H
J11	Super quiet	L
J12	Sleep	H
J13	Auto operation selector	L
J14	Remote control selector I	L
J15	Remote control selector II	L

L: Connected to
H: Connected to

Model : RSW-77R



Jumper Wire Function Selection

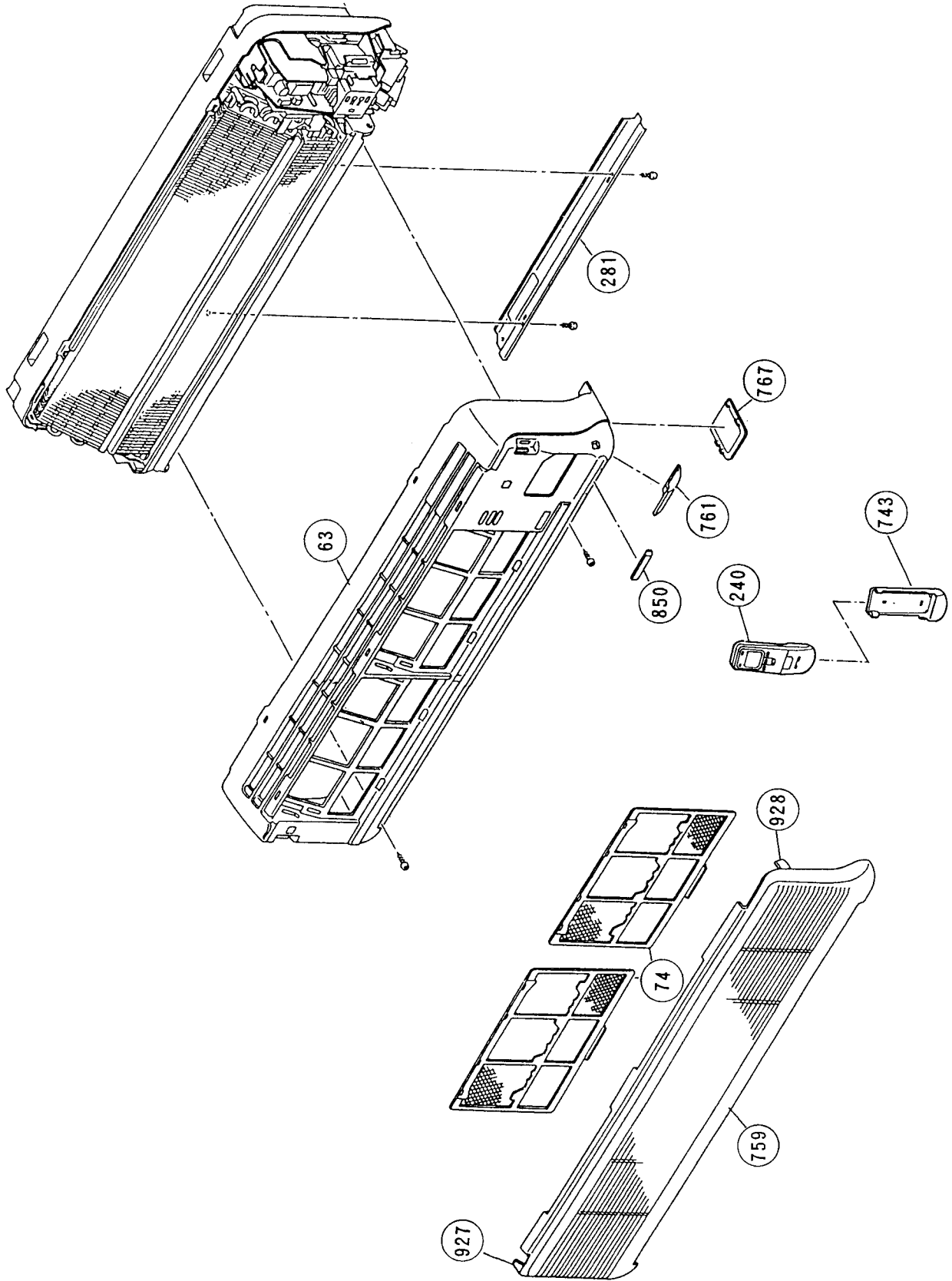
No.	Function	Setting
J1	Timer button change	L
J2	Transmitter code selector	H
J3	Heating operation	H
J4	Air flow direction/Auto louver	H
J5	Dry operation	H
J6	Automatic operation temperature indication	H
J7	Fan mode/Circulation	H(open)
J8	24Hr/12Hr display selector	H
J9	Temperature unit selector	H
J10	Fan mode	H
J11	Super quiet	L
J12	Sleep	H
J13	Auto operation selector	L
J14	Remote control selector I	L
J15	Remote control selector II	L

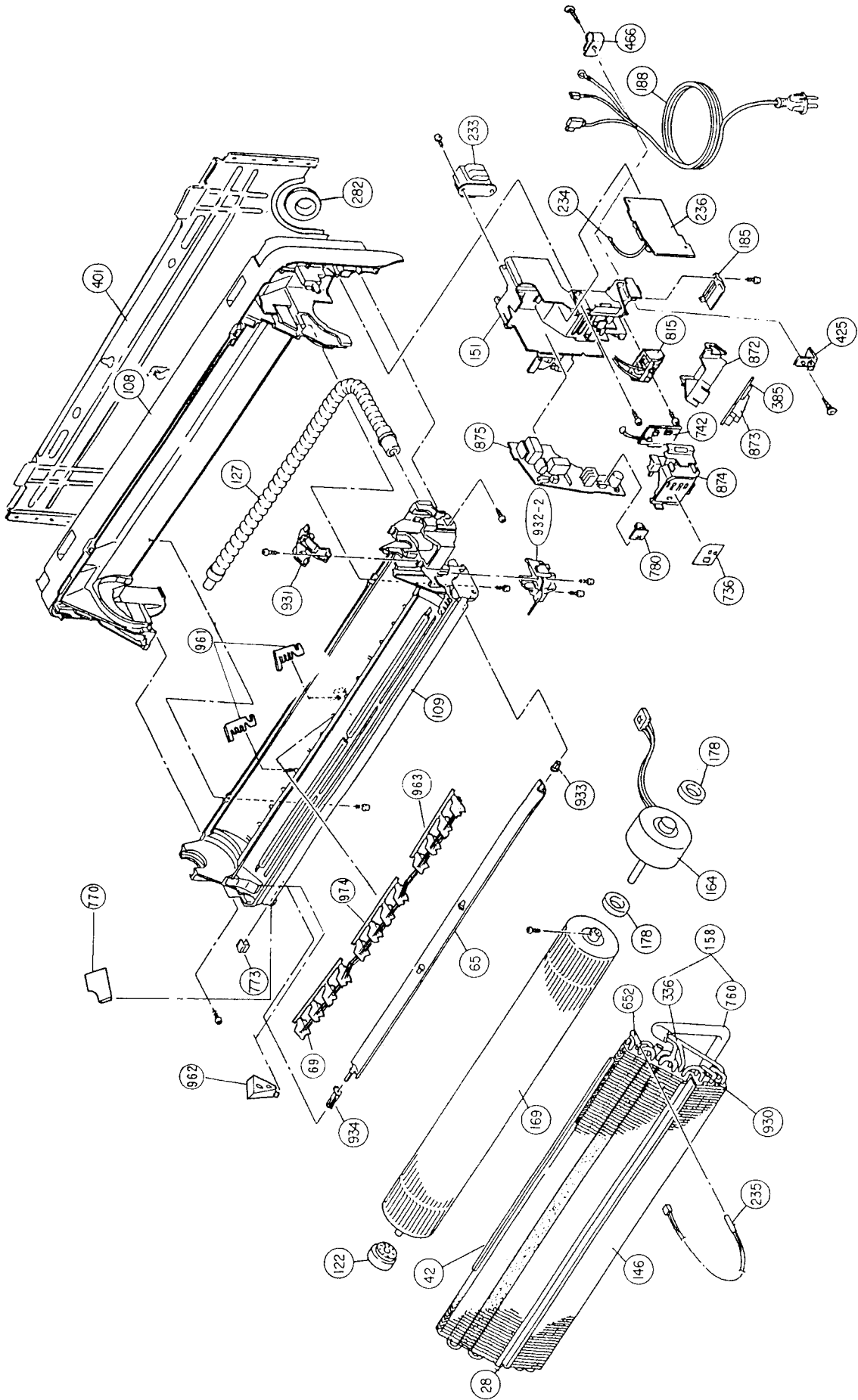
L: Connected to
H: Connected to

No.	KEY
K1	START/STOP
K2	MASTER CONTROL
K3	SET TEMP. (+), SET TIME(+)
K4	SET TEMP. (-), SET TIME(-)
K5	FAN CONTROL
K11	SUPER QUIET
K12	TIMER
K13	SLEEP
S1	ACL
S2	TIME ADJUST
S3	TEST RUN

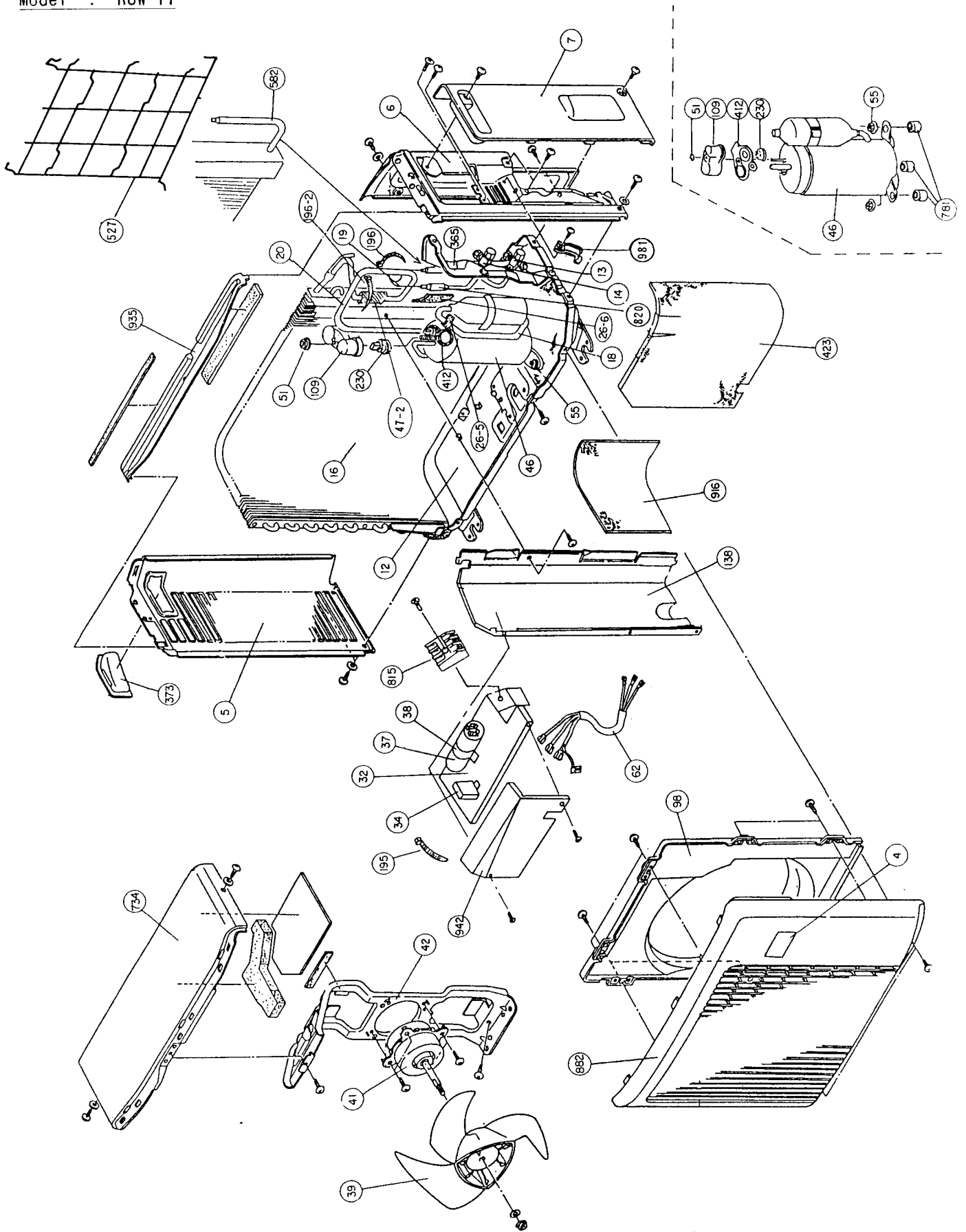
DISASSEMBLY ILLUSTRATION

Models : RSW-77/RSW-77R

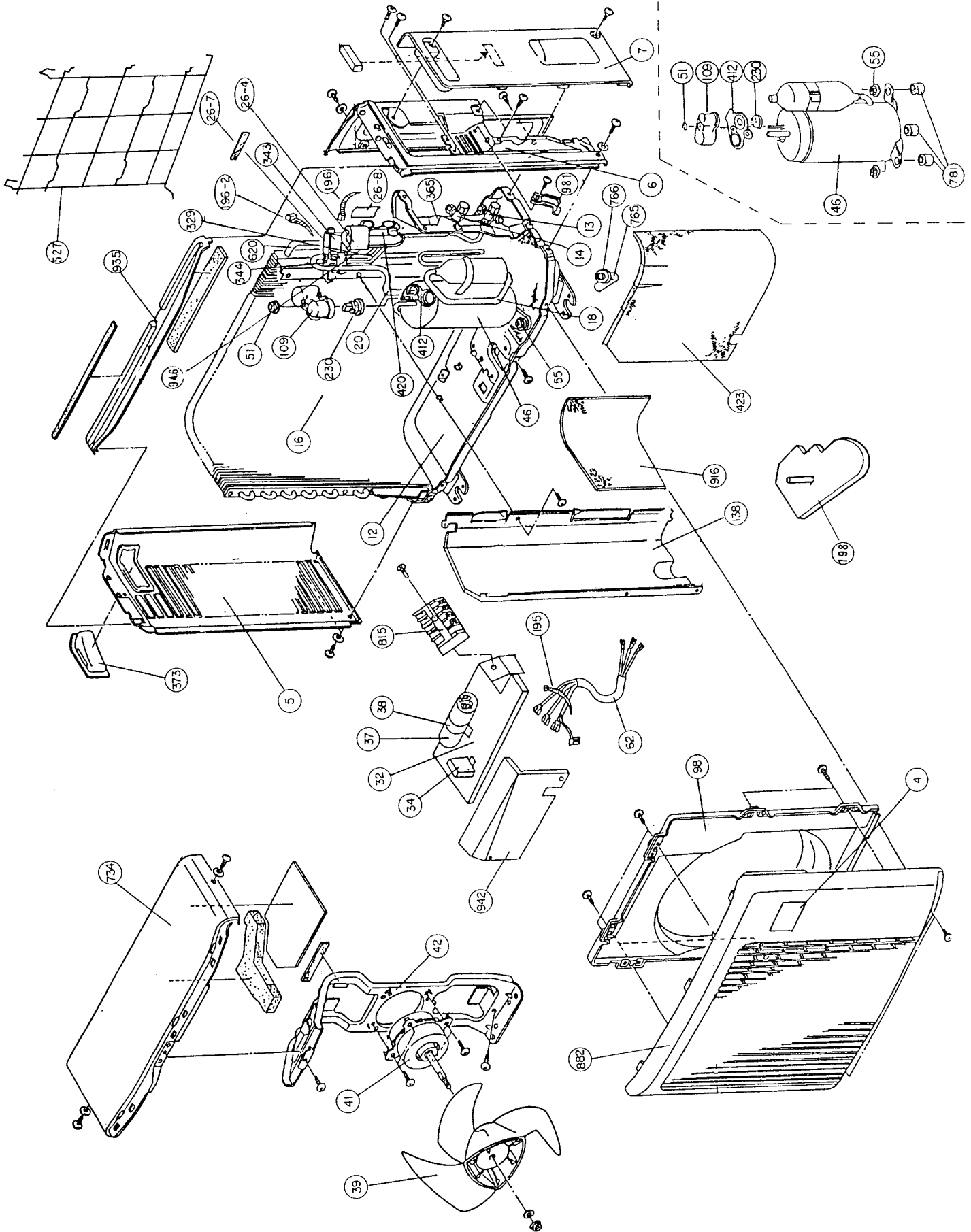




Model : ROW-77



Model : ROW-77R



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
		RSW-77	RSW-77R				RSW-77	RSW-77R	
28	Blower Cover	9304335009	9304335009		466	Clamp NK-4N	313714328805	313714328805	
42	Blower Cover-B	9304920007	9304920007		652	Thermistor Holder Pipe	313714262805	313714262805	
63	Front Panel	9304323044	9304323044		736	Operation Panel	9305555017	9305555017	
65	Flow Cont. Panel-Z	9304347040	9304347040		742	Switch PCB Assy	9701099016	9701099016	
69	Louver-A	9305885015	9305885015		743	Remote Control Holder	9305642014	9305642014	
74	Filter	9304350019	9304350019		759	Intake Grille-B	9305495030	9305495030	
108	Base	9304321064	9304321064		760	Insulation(Pipe)-F	-	9304050001	
109	Casing	9304322023	9304322023		760	Insulation(Pipe)-E	9304607007	9304607007	
122	Shaft Holder-B	9303066010	9303066010		761	Side Cover-R Assy	9304647089	9304647072	
127	Drain Hose Assy	9305550012	9305550012		767	Bottom Cover	9305960019	9305960019	
146	Evaporator Assy	9304667001	9304590002		770	Label (Deflect. Cont.)	9305563029	9305563012	
151	Control Box	9304325017	9304325017		773	Friction Spring	9304244004	9304244004	
158	Joint Pipe-E Assy	9304594000	-		780	Key Top (Slide Switch)	9303526002	9303526002	
158	Joint Pipe-F Assy	-	9304720003		815	Terminal-2P	9701955022	-	
164	Fan Motor Assy-IN	9304631071	9304631071		815	Terminal-4P	-	9701955039	
169	Cross-Flow Fan Assy	9304326021	9304326021		850	Window (Receiver)	9304351016	9304351016	
178	Motor Cushion-A	9303528006	9303528006		872	Indicator Case	9304342007	9304342007	
185	Wire Clamp	9305940004	9305940004		873	Lamp Cover	9304362005	9304362005	
188	Power Cord Assy	9701372027	9701372027		874	Control Box Cover-A	9304360018	9304360018	
233	Power Transformer	9701161010	9701161010		875	Power Supply PCB Assy	9701662012	9701556014	
234	Thermistor	9700801047	9700801047		927	Grille Hook-L	9304355014	9304355014	
235	Thermistor Assy-Pipe	9701102013	9701102013		928	Grille Hook-R	9304356011	9304356011	
236	Controller PCB Assy	9701101078	9701559015		930	"U" Pipe-J	9304455004	9304455004	
240	Remote Control Unit	9305554096	9305554089		931	Motor Clamp	9304331001	9304331001	
281	Clamp Metal (Pipe)	9304336006	9304336006		932-2	Outlet Cover-B	9305881017	9305881017	
282	Wall Cap-B	313714296205	313714296205		933	Spacer (Casing)-R	9304345015	9304345015	
336	Suction Pipe-E Assy	9304593003	-		934	Spacer (Casing)-L	9304344018	9304344018	
336	Suction Pipe-F Assy	-	9304721000		961	Guard Clamp	9305882014	9305882014	
385	Indicator PCB Assy	9701098019	9701098019		962	Guard Holder	9305883011	9305883011	
401	Wall Hook Bracket	9304358008	9304358008		963	Fan Guard	9305884018	9305884018	
425	Earth Terminal	9305588008	9305588008		974	Joint (Louver)-B	9305886012	9305886012	

OUTDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q' ty	Ref. No.	Description	Part No.		Ord. Q' ty
		ROW-77	ROW-77R				ROW-77	ROW-77R	
4	Emblem-Rear	9306331016	9306331016		46	Compressor Assy	9305685004	9305684007	
5	Cabinet-Left, Painted	9304823018	9304823018		47-2	Discharge Pipe Rubber	313185159802	-	
6	Cabinet-Right, Painted	9304821014	9304821014		51	Special Nut M5	313199233602	313199233602	
7	Connector Cover(Cabinet)	9304828006	9304828006		55	Special Nut M8	313252257701	313252257701	
12	Base Assy, Painted	9304806042	9304806042		62	Shield Tube-A Assy	9305695027	9305791026	
13	3-Way Valve	9304811008	9304811008		98	Fan Ring	9304827016	9304827016	
14	2-Way Valve	9304810001	9304810001		109	Terminal Cover	9302419008	9302419008	
16	Condenser Assy	9305692002	9305630004		138	Separate Wall-A	9304841005	9304841005	
18	Suction Pipe	9305683000	9305619009		195	Clamp SKB-100	313361275805	313361275805	
19	Capillary Tube	9306154004	-		196	Clamp SKB-150	313035356905	313035356905	
20	Discharge Pipe	9305676002	9305620005		196-2	Clamp SKB-3MC	9305335008	9305335008	
26-4	BR Sheet 50x120xT3	-	9300389013		198	Noise Insulation-A	-	9305908004	
26-5	BR Sheet 60x120xT5	9305039012	-		230	Overload Relay	9351537012	9351506018	
26-6	BR Sheet 120x100xT5	9305039029	-		329	Coupling Pipe	-	9305614004	
26-7	BR Sheet 30x120xT7	-	9305039036		343	Solenoid Coil	-	9305784011	
26-8	BR Sheet 65x170xT2	-	9305490011		344	4-Way Valve	-	313947302811	
32	Control Box Metal	9305644001	9305644001		365	Bracket (Valve)	9304803003	9304803003	
34	Capacitor (Fan Motor)	9700467038	9700467038		373	Grip	9304825005	9304825005	
37	Capacitor (Running)	9351578053	9351208011		412	Terminal Gasket (For Comp.)	9351505011	9351505011	
38	Clamp Metal (Capacitor)	313468061808	313468061808		420	Capillary Assy	-	9305629008	
39	Propeller Fan Assy	9305891009	9305891009		423	Noise Insulation-F	9305909001	9305909001	
41	Fan Motor Assy-Out	9600164150	9600164150		527	Protection Net	9305867004	9305867004	
42	Bracket (Motor)	9304816034	9304816034						

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

OUTDOOR UNIT (Continued)

Ref. No.	Description	Part No.		Ord. Q' ty	Ref. No.	Description	Part No.		Ord. Q' ty
		ROW-77	ROW-77R				ROW-77	ROW-77R	
582	Discharge Pipe-SF	9306115005	—		815	Terminal-5P	—	9306015015	
620	Inlet Pipe Assy	—	9305618002		820	Joint Pipe (Capillary)	9305680009	—	
734	Cabinet Top Plate, Painted	9304830016	9304830016		882	Blower Grille	9304826026	9304826026	
765	Drain Pipe (L-type)	—	9301102000		916	Noise Insulation-G	9305910007	9305910007	
766	Drain Pipe Packing	—	9301143003		935	Reinforcement Plate	9305035007	9305035007	
781	Rubber Cushion	9300293013	9300293013		942	Control Box Cover	9304844006	9304844006	
815	Terminal-3P	9305689033	—		946	Inlet Pipe (4-Way)	—	9305617005	
					981	Cord Clamp	9302271002	9302271002	

CONTROLLER PCB ASSEMBLY (Ref. No. 236)

() : Reverse cycle type

Ref. No.	Description	Part No.	Ord. Q' ty	Ref. No.	Description	Part No.	Ord. Q' ty
IC1	IC MB89625R-SH-267	1300255046		R34	Res. 10kΩ ± 0.5%	0201027257	
IC2	IC NJM7805FA	0100462081		R35	Res. 49.9kΩ ± 0.5%	0201027554	
IC3	IC NJM2904M	0100534054		R55	Res. 1.5kΩ ± 5%	6405902328	
IC4	IC PST600CMT	0101461120		JC1~3, 5, 7, 8, 10~13, 15	Res. 0Ω	6405904871	
IC5	IC MC1413D	0101736013		C6	Cap. Elec. 25V 1000μF	0300213278	
IC7	IC NM93C46M8-X	0101622026		C9~11, 13, 14, 20~25, 32~37	Cap. Ceramic 0.1μF	1902783046	
Q1, 3	Xstr DTC124EK	0000517034		C12	Cap. Ceramic 0.047μF	1902827092	
D5	Diode D1F60	0000208024		C19	Cap. Ceramic 1000pF	1902829072	
D10	Diode DAN202K	0000684019		C26, 27	Cap. Ceramic 1μF	1800119015	
R2, 4	Res. 4.7kΩ ± 5%	6405902449		C38	Cap. Ceramic 0.1μF	1902783046	
R3, 56	Res. 1kΩ ± 5%	6405902282		X1	Ceramic Resonator CST8.38MTW-TF01	1300116019	
R5, 10~14, 19~21, 26~29, 36, 52, 57	Res. 10kΩ ± 5%	6405902525		BZ1	Buzzer PKM13EPY-4000-TF01	9701298013	
R6	Res. 33kΩ ± 5%	6405902647		(JP2~6)	Wire IPS-3002-4	1903332014	
R7	Res. 6.8kΩ ± 5%	6405902483		JP5, 6, 9, 13~21, 23~25	Wire IPS-3002-4	1903332014	
R8	Res. 1MΩ ± 5%	6405903007		CN9	Plug, PCB 2-175487-8	0500891085	
R9	Res. 1.2kΩ ± 5%	0201001769		CN11	Plug, PCB B5P-SHF-1AA	0500006069	
R15	Res. 100kΩ ± 5%	6405902764		CN12	Thermistor (Room Temp.)	9700801047	
R16	Res. 2.2kΩ ± 5%	1800700039		CN13	Plug, PCB B2B-XH-A	0500005055	
R17, 54	Res. 1.5kΩ ± 5%	1800700022		CN16	Plug, PCB 175487-8	0500891023	
R18	Res. 1.8kΩ ± 5%	0200691725		CN17	Plug, PCB 175487-3	0500891078	
R22, 23, 53	Res. 330Ω ± 5%	6405902161					
R30~33	Res. 22kΩ ± 5%	6405902605					

POWER SUPPLY PCB ASSEMBLY (Ref. No. 875)

() : Reverse cycle type

Ref. No.	Description	Part No.	Ord. Q' ty	Ref. No.	Description	Part No.	Ord. Q' ty
Q101	Xstr 2SD880	0000001014		L101	EMI Filter PLAA2021R0R01B1	0400153092	
D101	Diode S1VB20	0000292054		SW101	Switch, Slide 8SS1012-1	9701426010	
D102	Diode RD15EB2	0000316019		HT1	Heat Sink B.PUE-16 L=25	9701376018	
D103, 104	Diode 1SR35-200A	0000016018		F101	Fuse 3.15A - 250V	0600222512	
R101	Res. Carbon 1/4W 10kΩ ± 5%	0201005019		FH101, 102	Fuse Holder PFC5000-0502	0500158072	
R102	Res. Carbon 1/2W 510Ω ± 5%	0200012377		JM102~105	Wire 0.6 dia. L=10mm	9700025016	
C101, 104	Cap. Plastic 250V 0.1μF	0300894835		(JM106)	Wire 0.6 dia. L=15mm	9700672012	
C102, 103	Cap. Ceramic 4700pF	0300727546		W1	Wire w/Terminal L=200 BLK	9700929024	
C105	Cap. Plastic 400V 1.3μF	0300939048		(W2)	Wire w/Terminal L=240 RED	9701050024	
C106	Cap. Elec. 35V 2200μF	0301017271		(W3)	Wire w/Terminal L=240 BLU	9701050017	
C107	Cap. Elec. 25V 10μF	0301192312		E	Wire w/Terminal L=210	9701660018	
C108	Cap. Ceramic 0.1μF	0300988251		CN101	Plug, PCB B2P3-VH-B	0500011728	
(CR101, 102)	Network RPEL-121204	9701125012		CN102	Plug, PCB B3P5-VH-B	0500011735	
VA101	Varistor TNR12G471K			CN103	Plug, PCB B2B-XH-AM	0500005321	
SSR101	Relay G3MB-202PL-UTU	0000038010		CN104	Plug, PCB 53405-0210	0500940011	
K101	Relay G4A-1A-PS	9701375011		CN105	Wire w/Connector L=180	9701052011	
(K102, 103)	Relay G4U-1-PS	9701024018					

INDICATOR PCB ASSEMBLY (Ref. No. 385)

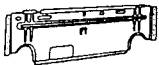

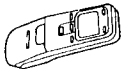







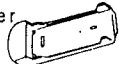


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Ref. No.	Description	Part No.	Ord. Q' ty	Ref. No.	Description	Part No.	Ord. Q' ty
D201	Diode SLR-325VC RED	0000813259		C202	Cap. Elec. 25V 10 μ F	0300001059	
D202	Diode SLR-325MC GRN	0000813242		X201	Remote Control Amplifier SBX1610-22	0100417050	
D203	Diode SLR-325DC ORG	0000813235		CN201	Wire w/Connector L=250 Lamp Cover	9701052028 9304362005	
D204	Diode SLR-325YC YEL	0000813273					
C201	Cap. Ceramic 0.01 μ F	0300988251					

SWITCH PCB ASSEMBLY (Ref. No. 742)

Ref. No.	Description	Part No.	Ord. Q' ty
SW301, 302	Switch, Push EVQ-PAG-04K	9700450016	
CN301	Wire w/Connector L=90	9701070015	

ACCESSORIES

Name and shape	Part No.	
	RSW-77	RSW-77R
Wall hook bracket 	9304358008	9304358008
Wall cap-B 	313714296205	313714296205
Remote control 	9305554096	9305554089
Battery(Penlight) 	313187358304	313187358304
Cable mark 		9301385007
Tapping screw (Big) (ϕ 4 \times 20) 	301141164200	301141164200
Tapping screw (Small) (ϕ 3 \times 12) 	301141533125	301141533125
Hexagon wrench 	301980005800	301980005800
Drain pipe (Including drain packing) 		9303029015
Spacer 		
Remote control unit holder 	9305642014	9305642014
Cloth tape 	9304232001	9304232001
Drain insulation 	9302261010	9302261010



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