

SPLIT TYPE ROOM AIR CONDITIONER

WALL MOUNTED type

SERVICE MANUAL

Models

Indoor unit

Outdoor unit

ASY9ASGCW

AOY9ANGC

ASY9RSGCW

AOY9RSGC

ASY12ASGCW

AOY12ASGC

ASY12RSGCW

AOY12RSGC

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

TYPE		COOL	COOL & HEAT	COOL	COOL & HEAT
INDOOR UNIT		ASY9ASGCW	ASY9RSGCW	ASY12ASGCW	ASY12RSGCW
OUTDOOR UNIT		AOY9ANGC	AOY9RSGC	AOY12ASGC	AOY12RSGC
COOLING CAPACITY	(kW)	2.75 - 2.70	2.75 - 2.70	3.50 - 3.45	3.45 - 3.40
HEATING CAPACITY	(kW)	————	3.35 - 3.30	————	4.05 - 3.95

ELECTRICAL SPECIFICATIONS

POWER SUPPLY	(V)	240 - 220			
FREQUENCY	(Hz)	50			
RUNNING CURRENT	COOLING	4.7 - 4.6	4.5 - 4.6	6.3 - 6.1	5.9 - 5.8
	HEATING	————	4.1 - 4.2	————	5.9 - 5.8
INPUT	COOLING	1.03 - 0.97	1.03 - 0.98	1.340 - 1.265	1.26 - 1.21
	HEATING	————	0.94 - 0.89	————	1.28 - 1.21
EER	COOLING	2.67 - 2.78	2.67 - 2.76	2.61 - 2.73	2.74 - 2.81
	HEATING	————	3.56 - 3.71	————	3.16 - 3.26
MOISTURE REMOVAL	(ℓ /hr)	1.3	1.3	1.8	1.8
AIR CIRCULATION-Hi	(m³/hr)	480	COOL 495 HEAT 510	495	COOL 510 HEAT 510

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor			
CODE	2PS180D5AA02 240 - 220V 50Hz	80697645B 240 - 220V 50Hz	80615945B 240 - 220V 50Hz	80615945B 240 - 220V 50Hz
REFRIGERANT	R-22 (g)	670	900	750
				1,100

FAN MOTOR

POWER SUPPLY	(V)	240 - 220			
INDOOR UNIT	HI-SPEED (r.p.m.)	1,300	COOL 1,300 HEAT 1,330	1,330	COOL 1,330 HEAT 1,330
	MED-SPEED (r.p.m.)	1,200	COOL 1,210 HEAT 1,180	1,250	COOL 1,260 HEAT 1,180
	LO-SPEED (r.p.m.)	1,100	COOL 1,140 HEAT 1,030	1,170	COOL 1,190 HEAT 1,030
	QUIET (r.p.m.)	1,040	COOL 1,070 HEAT 970	1,080	COOL 1,120 HEAT 970
OUTDOOR UNIT	(r.p.m.)	705 - 660	720 - 675	790 - 760	710 - 665

DIMENSIONS

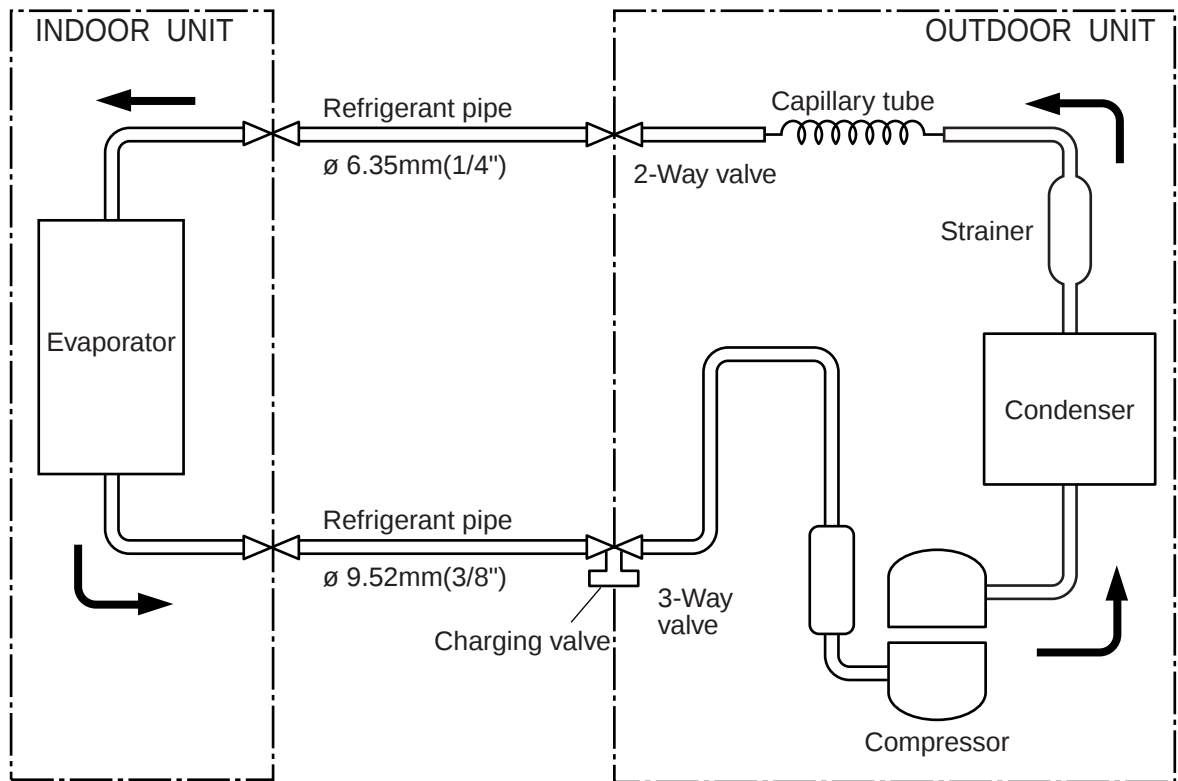
INDOOR UNIT	H x W x D (mm)	260 x 815 x 168
OUTDOOR UNIT	H x W x D (mm)	535 x 695 x 250

WEIGHT

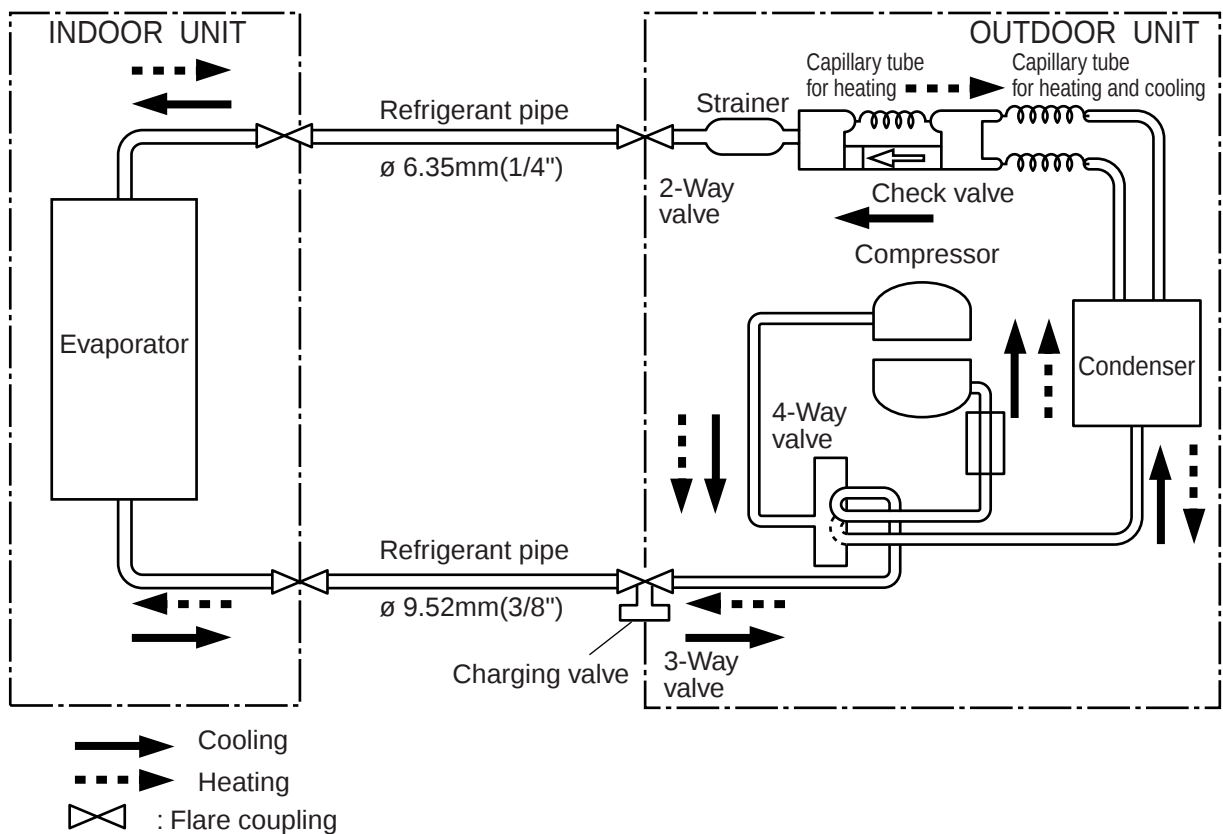
INDOOR UNIT	GROSS / NET (kg)	10 / 8			
OUTDOOR UNIT	GROSS / NET (kg)	29 / 26	31 / 28	33 / 30	36 / 33

REFRIGERANT SYSTEM DIAGRAM

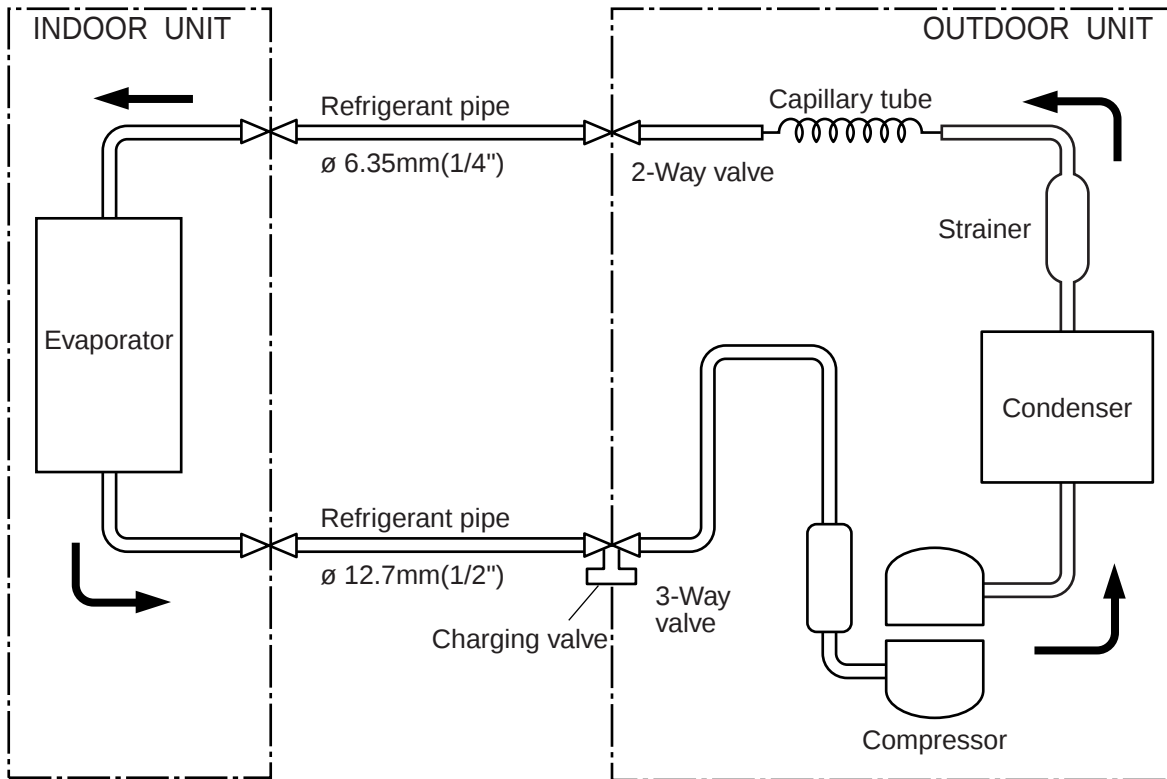
Models : ASY9ASGCW / AOY9ANGC



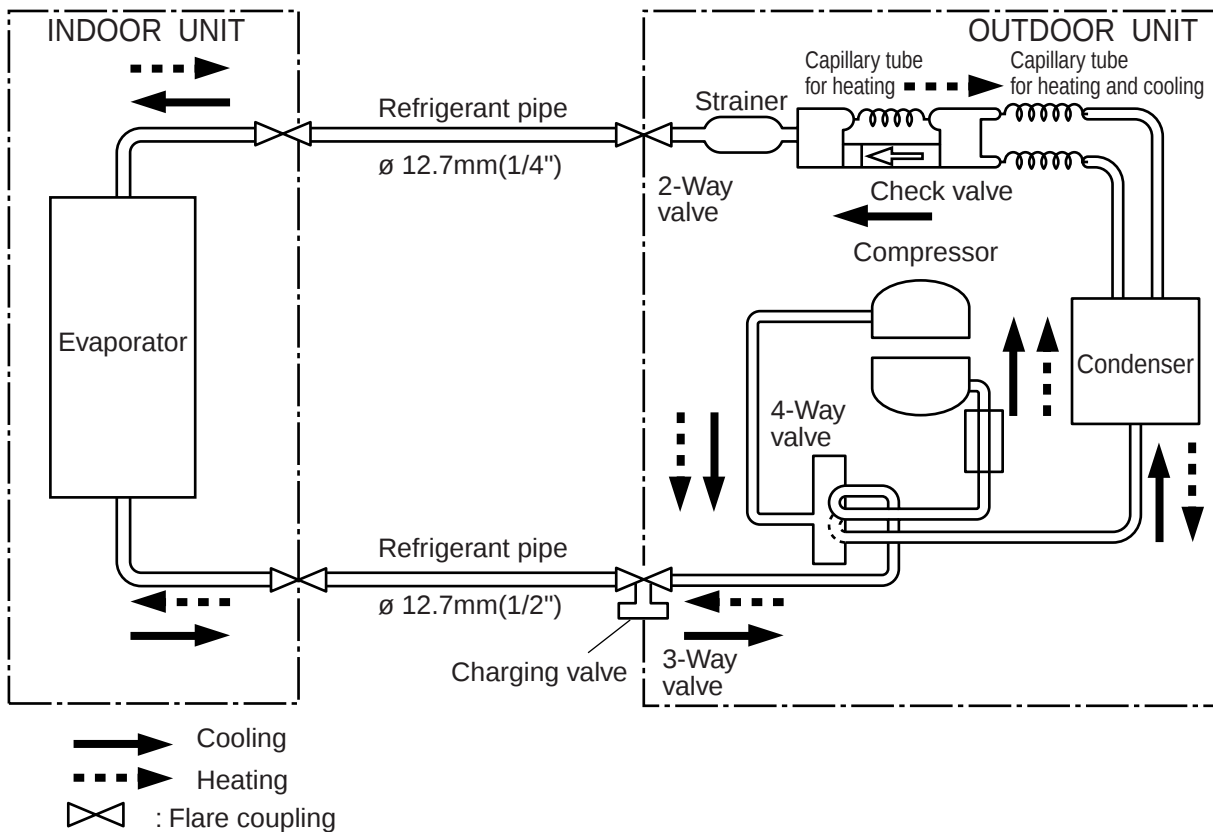
Models : ASY9RSGCW / AOY9RSGC



Models : ASY12ASGCW / AOY12ASGC

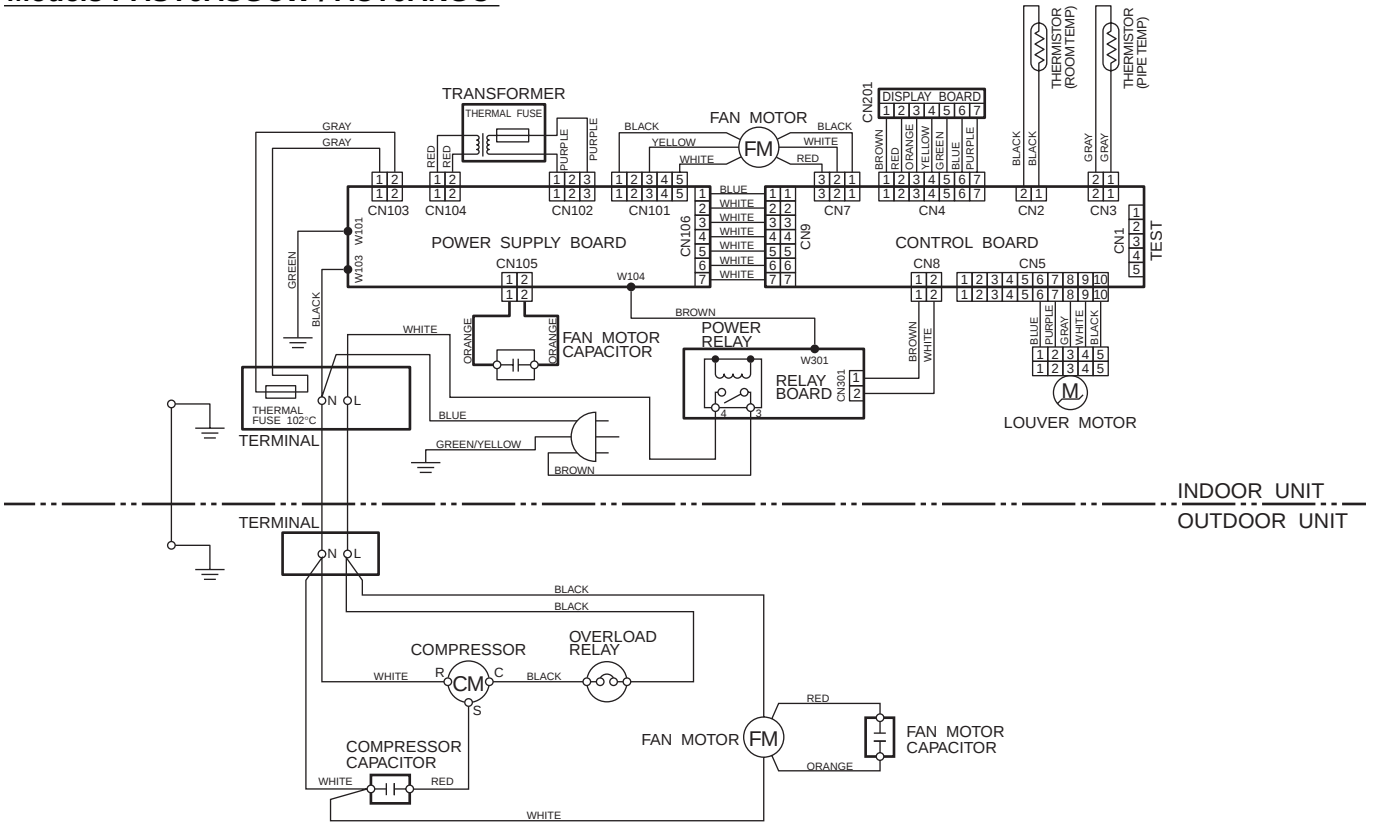


Models : ASY12RSGCW / AOY12RSGC

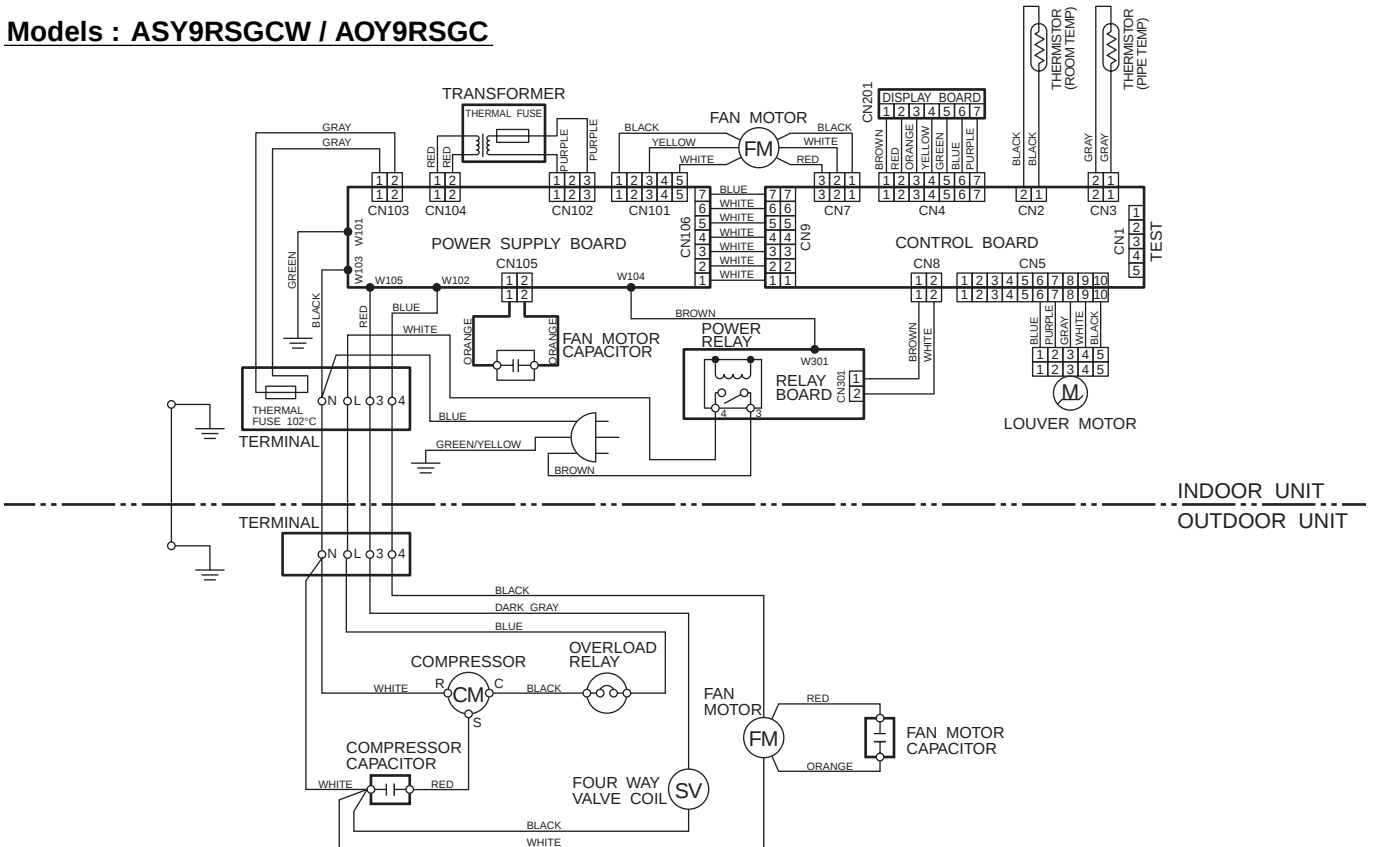


CIRCUIT DIAGRAM

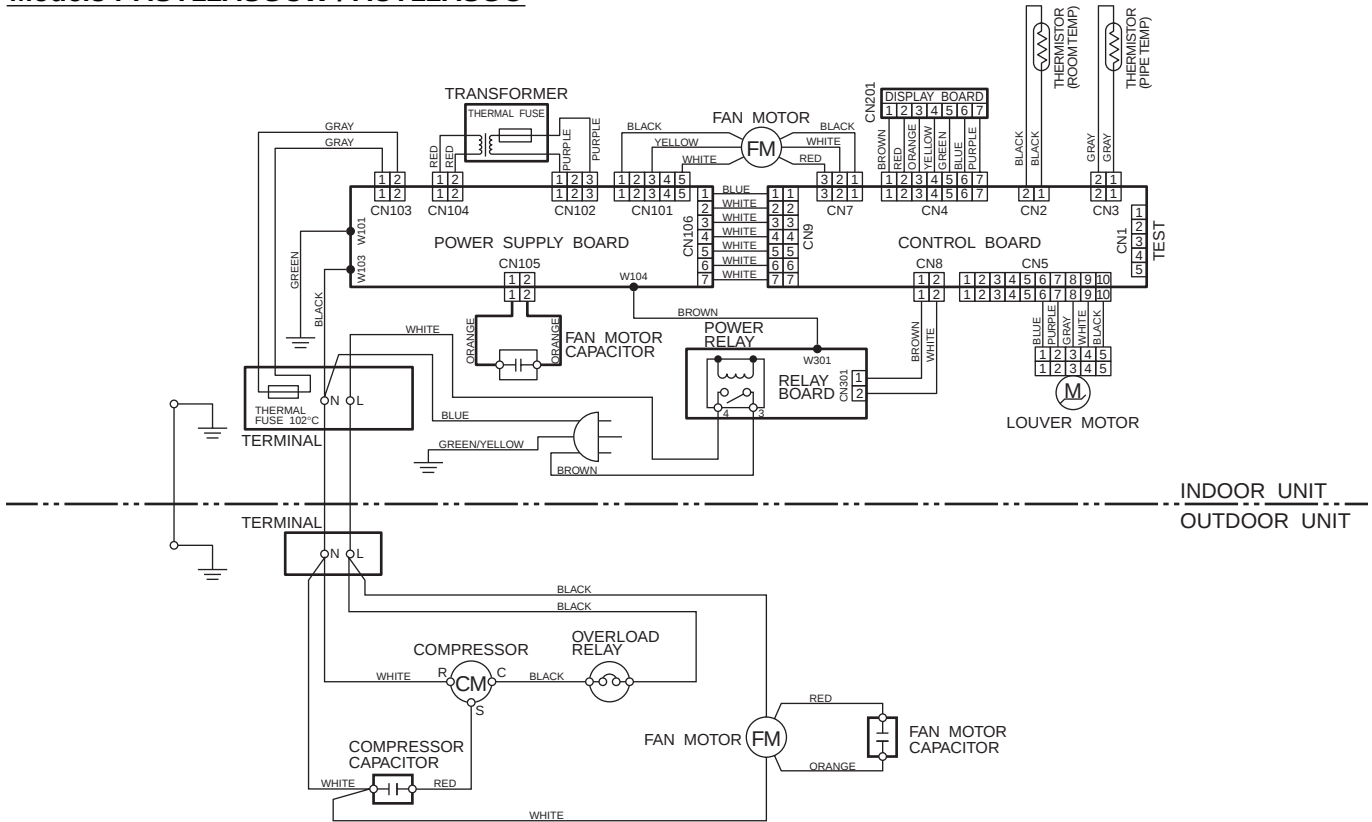
Models : ASY9ASGCW / AOY9ANGC



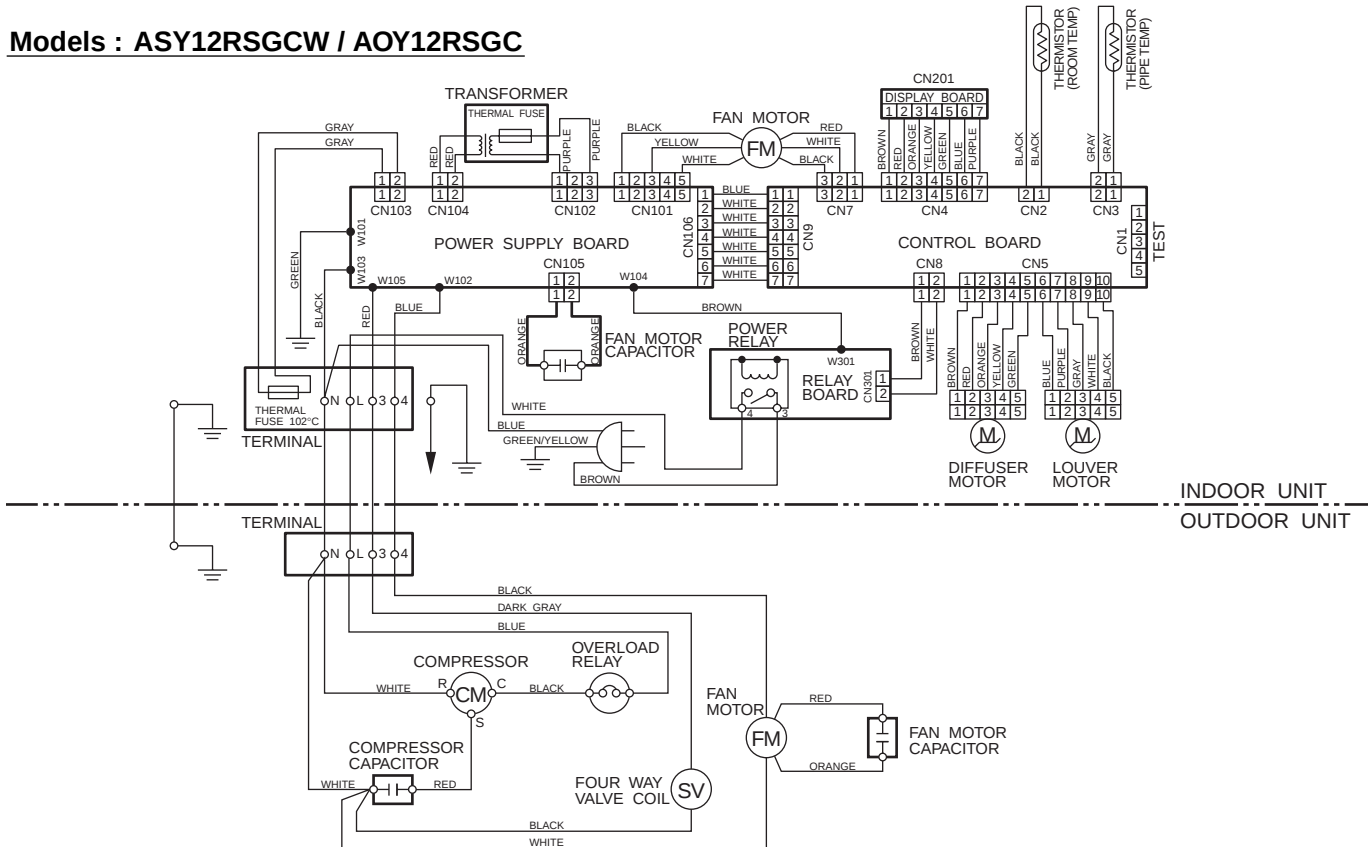
Models : ASY9RSGCW / AOY9RSGC



Models : ASY12ASGCW / AOY12ASGC

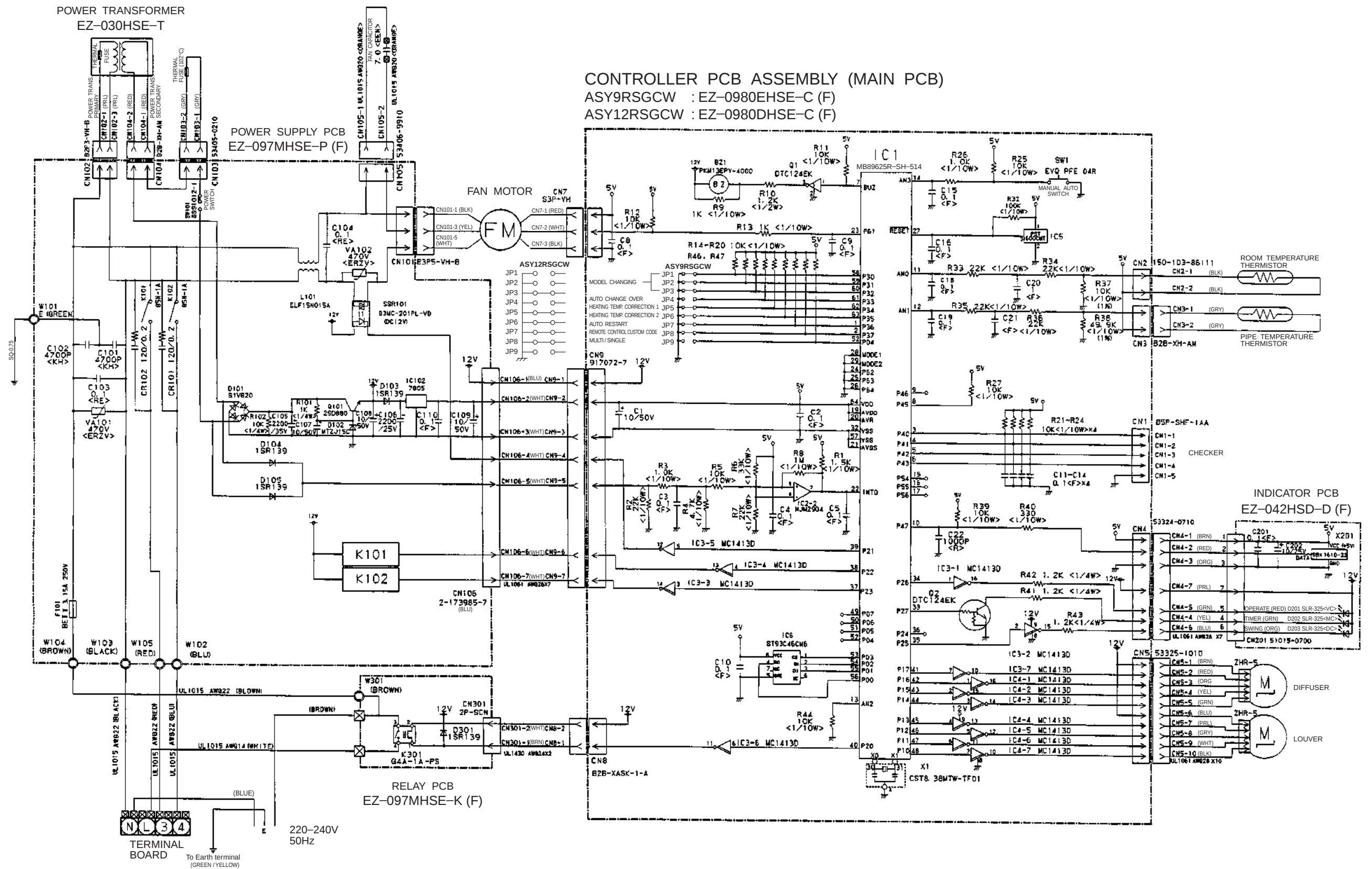


Models : ASY12RSGCW / AOY12RSGC



Models : ASY9ASGCW, ASY12ASGCW





Models : ASY9ASGCW
ASY12ASGCW

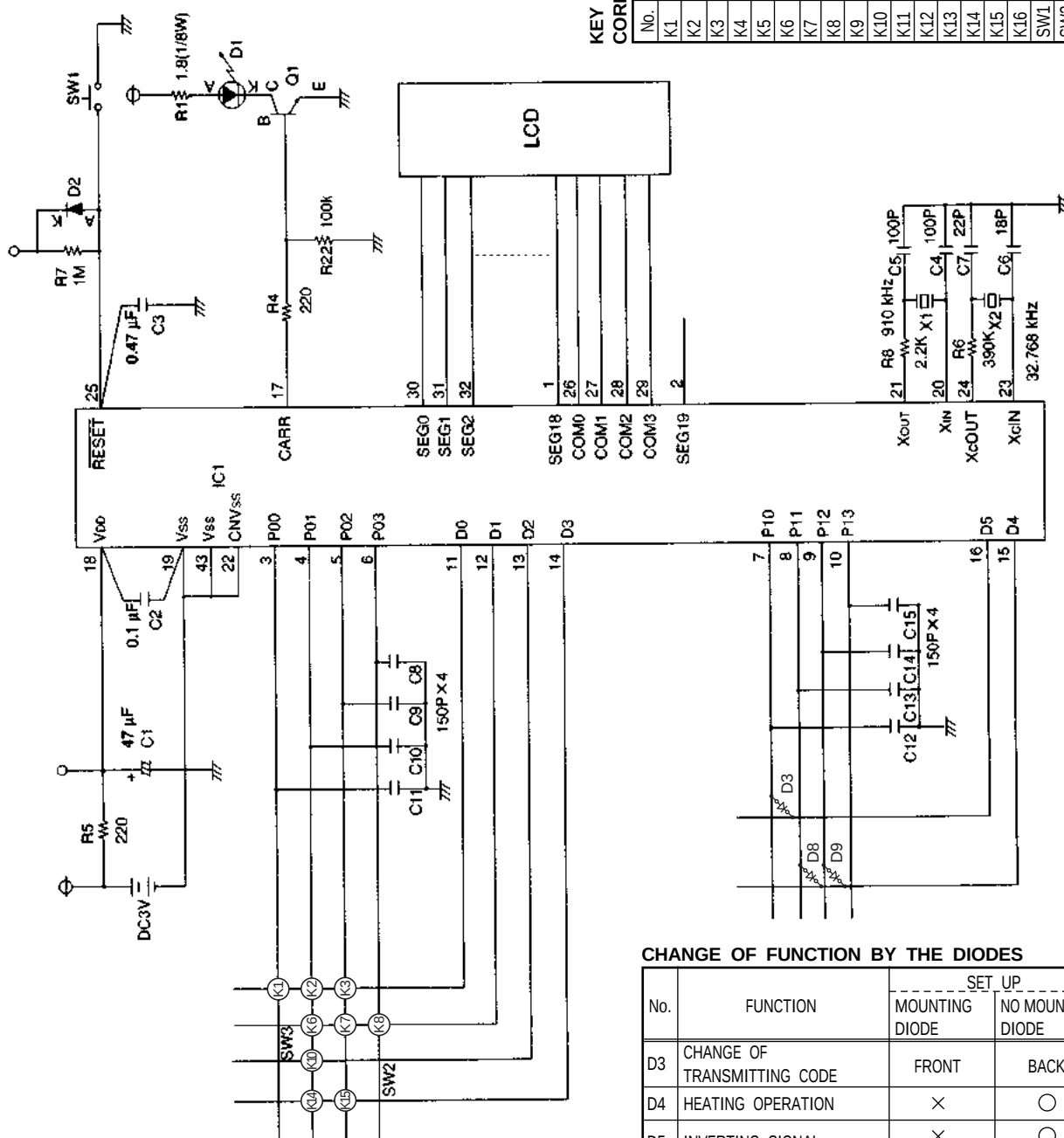


CONTROL SOURCE / MODE	
No.	KEY FUNCTION
K1	MASTER CONTROL
K2	SET TEMP. (+), SET TIME (+)
K3	FAN CONTROL
K4	
K5	
K6	SET TEMP. (-), SET TIME (-)
K7	AIR FLOW DIRECTION
K8	SWING LOUVER
K9	
K10	START / STOP
K11	
K12	
K13	
K14	SLEEP
K15	TIMER
K16	
SW1	ACL
SW2	TIME ADJUST
SW3	TEST RUN

No.	FUNCTION	SET UP	
		MOUNTING DIODE	NO MOUNTING DIODE
D3	CHANGE OF TRANSMITTING CODE	FRONT	BACK
D4	HEATING OPERATION	○	×
D5	INVERTING SIGNAL	×	○
D6	TEMPERATURE DISPLAY OF AUTMATIC OPERATION	18-30°C	±2°C
D7	NO CHANGE OF FUNCTION	—————	
D8	SILENT	○	×
D9	WINDNESS OPERATION	○	×
D10	NO CHANGE OF FUNCTION	—————	

× : Impossible

**Models : ASY9RSGCW
ASY12RSGCW**



KEY NO. KEY FUNCTION
CORRESPONDENCE TABLE

No.	KEY FUNCTION
K1	MASTER CONTROL
K2	SET TEMP. (+), SET TIME (+)
K3	FAN CONTROL
K4	
K5	
K6	SET TEMP. (-), SET TIME (-)
K7	AIR FLOW DIRECTION
K8	SWING LOUVER
K9	
K10	START / STOP
K11	
K12	
K13	
K14	SLEEP
K15	TIMER
K16	
SW1	ACL
SW2	TIME ADJUST
SW3	TEST RUN

CHANGE OF FUNCTION BY THE DIODES

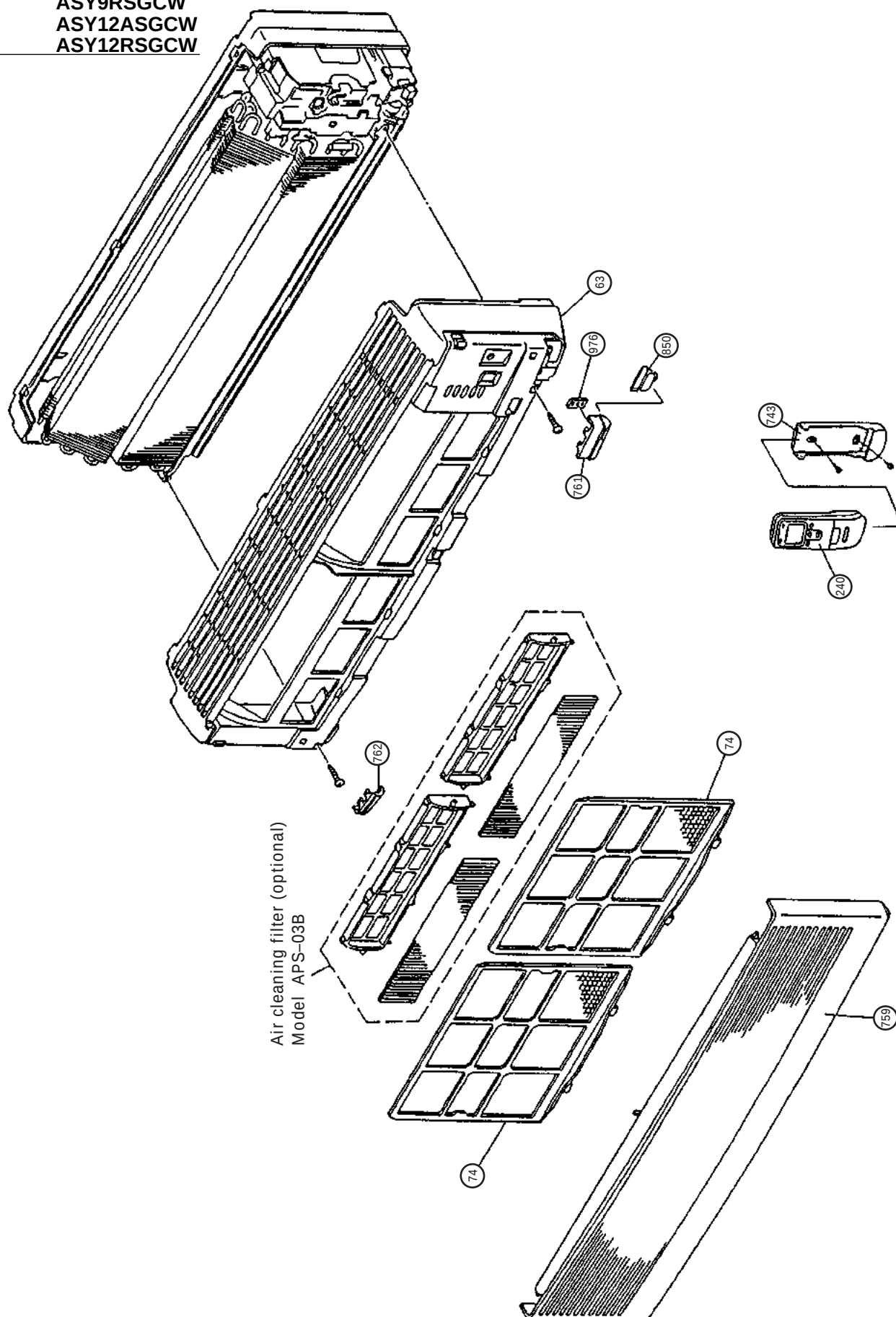
No.	FUNCTION	SET UP	
		MOUNTING DIODE	NO MOUNTING DIODE
D3	CHANGE OF TRANSMITTING CODE	FRONT	BACK
D4	HEATING OPERATION	×	○
D5	INVERTING SIGNAL	×	○
D6	TEMPERATURE DISPLAY OF AUTOMATIC OPERATION	18-30°C	±2°C
D7	NO CHANGE OF FUNCTION	—————	
D8	SILENT	○	×
D9	WINDNESS OPERATION	○	×
D10	NO CHANGE OF FUNCTION	—————	

○ : Possible

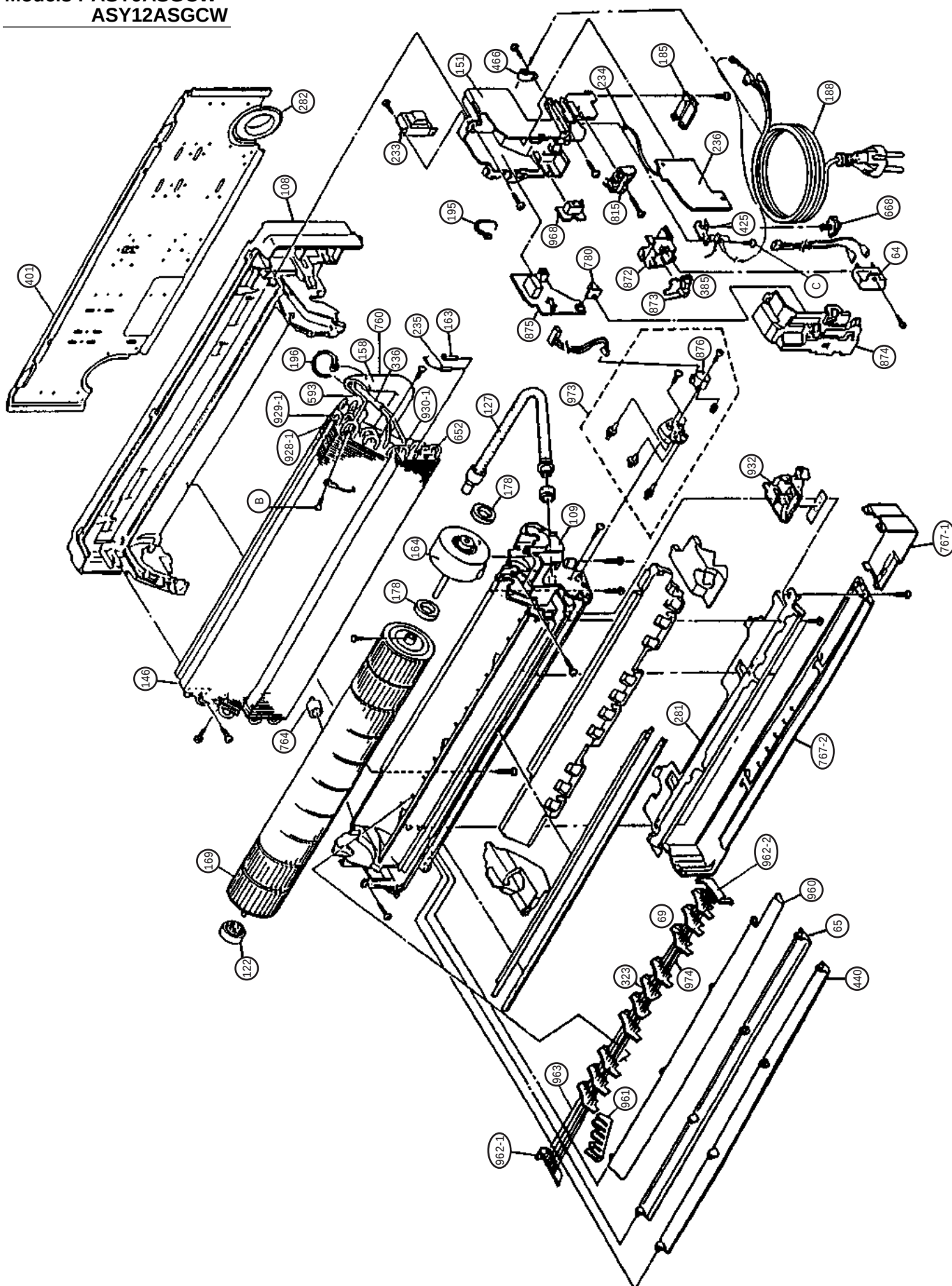
× : Impossible

DISASSEMBLY ILLUSTRATION

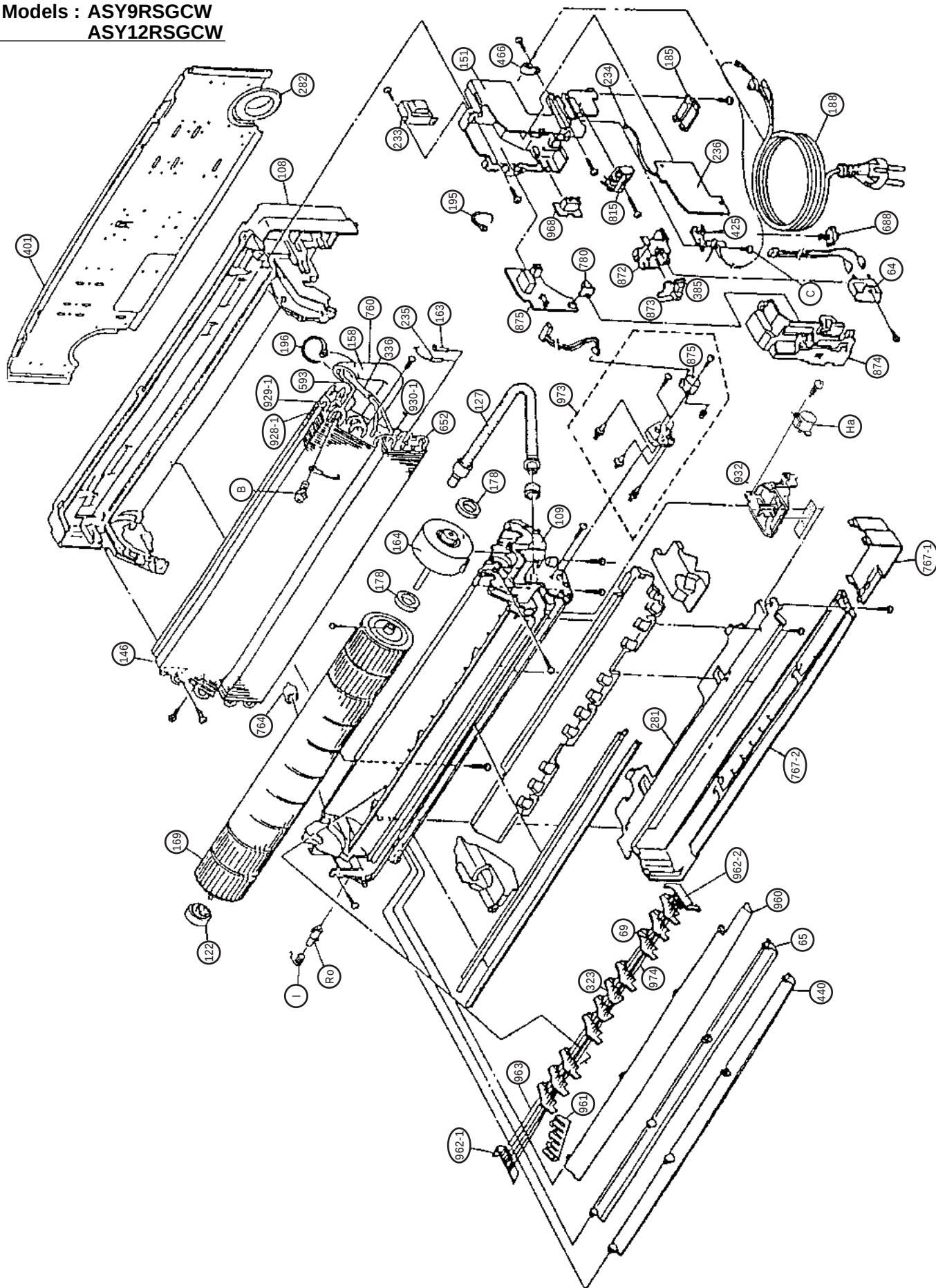
Models : ASY9ASGCW
ASY9RSGCW
ASY12ASGCW
ASY12RSGCW



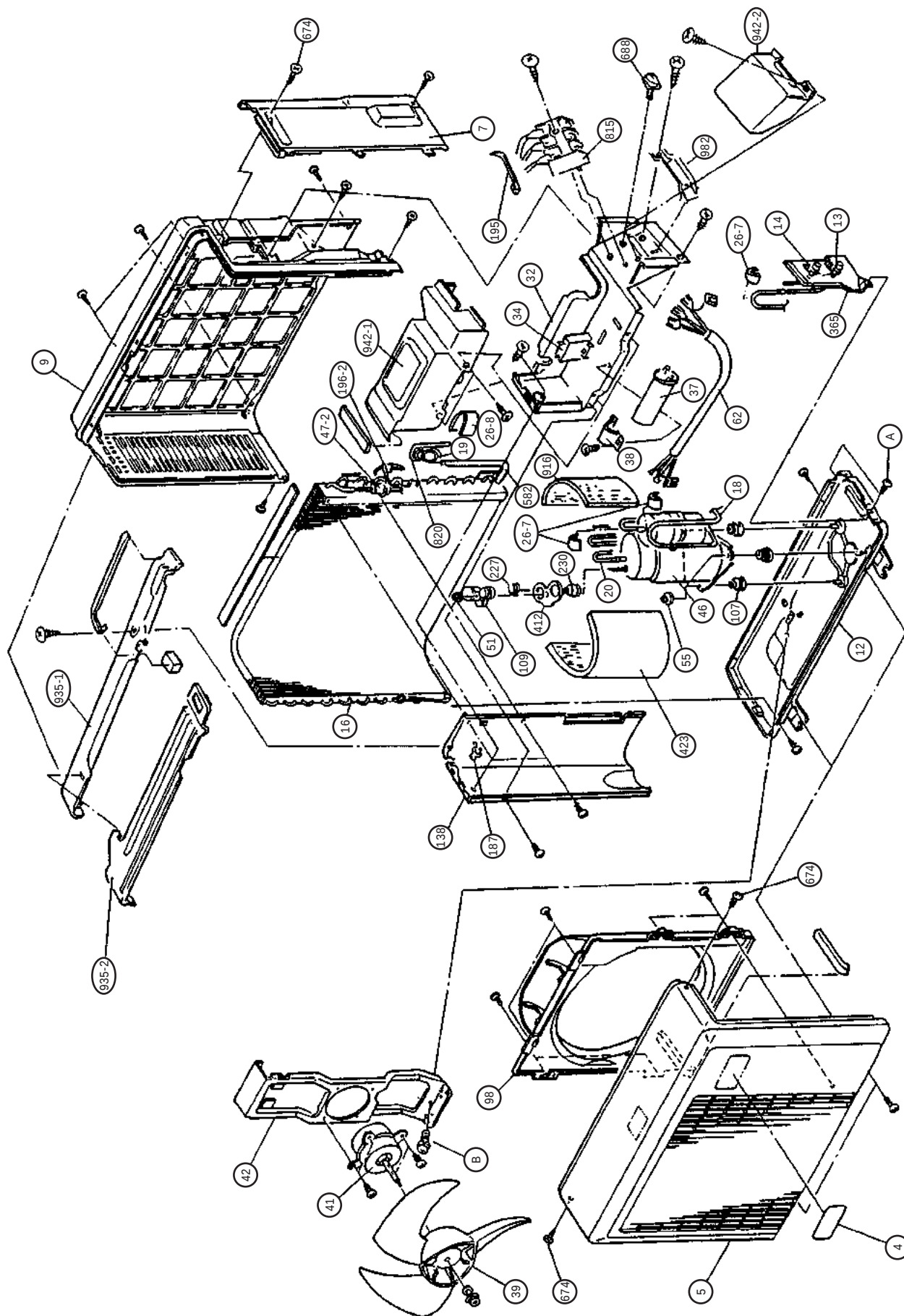
Models : ASY9ASGCW
ASY12ASGCW

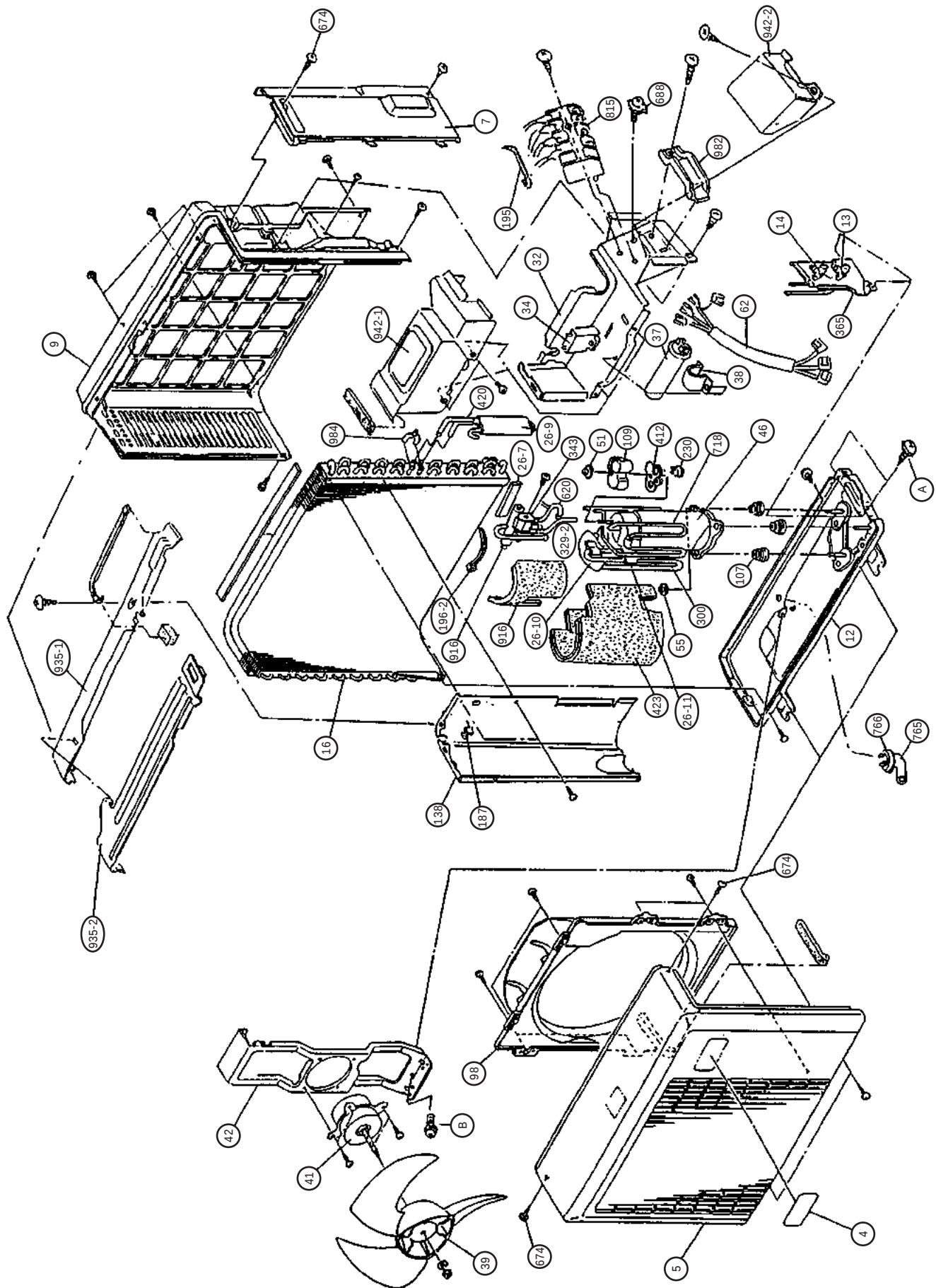


Models : ASY9RSGCW
ASY12RSGCW



Model : AOY9ANGC





PARTS LIST

INDOOR UNIT

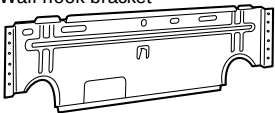
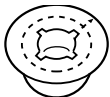
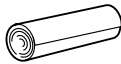
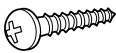
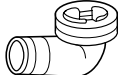
Ref. No.	Description	Part No.				Ord. Q'ty
		ASY9ASGCW	ASY9RSGCW	ASY12ASGCW	ASY12RSGCW	
63	Front Panel Assy	9305656097	9305656097	9305656097	<u>9305436019</u>	
64	Capacitor (Fan Motor)	9700468103	9700468103	9700468103	9700468103	
65	Flow Control Panel-Z	9305443017	9305443017	9305443017	9305443017	
69	Louver-A	9305415014	9305415014	9305415014	9305415014	
74	Filter	9305444014	9305444014	9305444014	9305444014	
108	Base	9305427017	9305427017	9305427017	9305427017	
108	<u>Base(New type)</u>			9309755017	9309755017	
109	Casing	9305411016	9305411016	9305411016	9305411016	
122	Shaft Holder-B	9303066010	9303066010	9303066010	9303066010	
127	Drain Hose Assy	9305550029	9305550029	9305550029	9305550029	
146	Evaporator Assy	9308203021	9308555014	9308555014	9308555014	
151	Control Box	9305448036	9305448036	9305448036	9305448036	
158	Connecting Pipe Assy	9306416010	9306416010	9307073007	9307073007	
163	Thermistor Spring	313104262701	313104262701	313104262701	313104262701	
164	Fan Motor Assy-IN	9306448011	9306448011	<u>9601172017</u>	<u>9601172017</u>	
169	Cross-flow Fan Assy	9307836015	9307836015	9307836015	9307836015	
178	Motor Cushion-A	9306274009	9306274009	<u>9601302018</u>	<u>9601302018</u>	
185	Wire Clamp	9305940004	9305940004	9305940004	9305940004	
188	Power Cord Assy	9702595012	9702595012	9702595012	9702595012	
195	Clamp SKB-100	313361275805	313361275805	313361275805	313361275805	
196	Clamp SKB-150	313035356905	313035356905	313035356905	313035356905	
233	Power Transformer	9701803026	9701565023	<u>9900028015</u>	<u>9900028015</u>	
234	Thermistor Assy-(Room)	9702324018	9702324018	9702324018	9702324018	
235	Thermistor Assy-(Pipe)	9702425012	9702425012	<u>9702039035</u>	<u>9702039035</u>	
236	Controller PCB Assy	9702889036	9702884024	9702889043	9702884017	
240	Remote Control Unit	9307113048	9307113055	9307113048	<u>9307113055</u>	
281	Clamp Metal (Pipe)	9306192006	9305430000	9306192006	9305430000	
282	Wall Cap-B (Accessory)	313714296205	313714296205	313714296205	313714296205	
323	Louver-B	9305597017	9305597017	9305597017	9305597017	
336	Suction Pipe-A Assy	9305741014	9305741014	9306175009	9306175009	
385	Indicator PCB Assy	9701364213	9701364213	9701364213	9701364213	
401	Wall Hook Bracket	9304358008	9304358008	9304358008	9304358008	
425	Earth Terminal	9306483005	9306483005	9306483005	9306483005	
440	Flow Control Panel-U	9306173036	9306173036	9306173036	9306173036	
466	Clamp NK-4N	313714328805	313714328805	313714328805	313714328805	
593	Discharge Pipe-A Assy	9306417017	9306417017	9306417017	9306417017	
652	Thermistor Holder Pipe	313714262805	313714262805	313714262805	313714262805	
743	Remote Control Holder Case	9305642014	9305642014	9305642014	9305642014	
759	Intake Grille	9305995028	9305995028	9305995028	9305995028	
760	Insulation (Pipe)-E	9304607007	9304607007	9304607007	9304607007	
761	Side Cover-R	9305996025	9305996025	9305996025	9305996025	
762	Side Cover-L	9305437054	9305437054	9305437054	9305437054	
764	Drain Cap Assy	9304150008	9304150008	9304150008	9304150008	
767-1	Bottom Cover-A	9305428014	9305428014	9305428014	9305428014	
767-1	<u>Bottom Cover-A (Wide type)</u>	<u>9309801011</u>	<u>9309801011</u>	<u>9309801011</u>	<u>9309801011</u>	
767-2	Bottom Cover-B	9305429011	9305429011	9305429011	9305429011	
767-2	<u>Bottom Cover-B (New type)</u>	<u>9309802018</u>	<u>9309802018</u>	<u>9309802018</u>	<u>9309802018</u>	
780	KAey Top (Slide Switch)	9303526002	9303526002	9303526002	9303526002	
815	Terminal-2P	9701955022		9701955022		
815	Terminal-4P		9701955039		9701955039	
850	Window (Receiver)	9305439010	9305439010	9305439010	9305439010	
872	Indicator Case	9305978014	9305978014	9305978014	9305978014	
873	Lamp Cover	9305451012	9305451012	9305451012	9305451012	
874	Control Box Cover	9305977017	9305977017	9305977017	9305977017	
875	Power Supply PCB Assy	9702440213	9702440220	9702440213	9702440220	
876-1	Step Motor	9900030018	9900030018	9900030018	9900030018	
876-2	Step Motor		9900030018		9900030018	
928-1	U-Pipe (BB)	9305747009	9305747009	9305747009	9305747009	
929-1	U-Pipe (V)	9305748006	9305748006	9305748006	9305748006	
930-1	U-Pipe (W)	9305749003	9305749003	9305749003	9305749003	
932	Outlet Cover	9305414017	9305414017	9305414017	9305414017	
960	Diffuser	9305412013	9305412013	9305412013	9305412013	
961	Guard Clamp	9306332013	9306332013	9306332013	9306332013	
962-1	Guard Holder-L	9305753017	9305753017	9305753017	9305753017	
962-2	Guard Holder-R	9305752010	9305752010	9305752010	9305752010	
963	Fan Guard	9305751013	9305751013	9305751013	9305751013	
964	Flare Nut-A	9307767005	9307767005	<u>9310783016</u>	<u>9310783016</u>	
965	Flare Nut-B	9307768002	9307768002	9307768002	9307768002	
966	Bonnet-A	9304798019	9304798019			
967-1	Bonnet-B	9304799016	9304799016	9304799016	9304799016	
967-2	Bonnet-C			9306700010	9306700010	
968	Relay PCB Assy	9702443214	9702443214	9702443214	9702443214	
973	Gear Assy	<u>9310820018</u>	<u>9310820018</u>	<u>9310820018</u>	<u>9310820018</u>	
974	Joint (Louver)	9305416011	9305416011	9305416011	9305416011	
976	Window (Indicator)	9305440016	9305440016	9305440016	9305440016	
B	Machine Screw (with Spring Washer)	0700179013	0700179013	0700179013	0700179013	
C	Machine Screw (with Spring Washer)	301291134088	301291134088	301291134088	301291134088	

OUTDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		AOY9ANGC	AOY12ASGC	
4	Emblem-Rear	9306337001	9306337001	
5	Cabinet Front Panel, Plastic	9305525010	9305525010	
7	Connector Cover (Cabinet)	9306119010	9306119010	
9	Cabinet Rear Panel, Plastic	9305526017	9305526017	
12	Base Assy, Painted	9306118044	9306118068	
13	3-Way Valve	9306801014	9306802011	
14	2-Way Valve	9306800017	9306800017	
16	Condenser Assy	9306415006	9307276002	
18	Suction Pipe	9306041007	9306358006	
19	Capillary Tube	9306043001	9308226006	
20	Discharge Pipe Assy	9306038007	9306365004	
26-7	BR Sheet 30x120xT7	9305039036	9305039036	
26-8	BR Sheet 65x170xT2	9305490011	9305490011	
32	Control Box Metal	9305972005	9305972005	
34	Capacitor (Fan Motor)	9700468080	9700468110	
37	Capacitor (Running)	9306512019	9306512026	
38	Clamp Metal (Capacitor)	313468061808	313468061808	
39	Propeller Fan	9305538003	9305538003	
41	Fan Motor	9307095016	9307715013	
42	Bracket (Motor)	9305536016	9305536016	
46	Compressor Assy	9306095000	9308228000	
47-2	Discharge Pipe Rubber	313185159802	313185159802	
51	Special Nut M5	9300301015	9307091001	
55	Special Nut M8	313252257701	-----	
62	Wire Assy (Shield)-A	9305695027	9305695027	
98	Fan Ring	9305581023	9305581023	
107	Rubber Seat-A	9351049010	9307092008	
109	Terminal Cover (Comp.)	9351048013	9307090004	
138	Separate Wall	9305971008	9305971008	
155	Special Nut M6	-----	9307615016	
187	Clamp No. 1219	313361271706	313361271706	
195	Clamp SKB-100	313361275805	313361275805	
196	Clamp SKB-150	313035356905	313035356905	
196-2	Clamp SKB-3MC	9305335008	9305335008	
227	OCR Spring (Comp.)	9351050016	-----	
230	Overlord Relay	9306096007	9352453007	
365	Bracket (Valve)	9306748012	9306748012	
412	Terminal Gasket (Comp.)	9351051013	9307089008	
423	Noise Insulation-F	9306097004	9306424008	
582	Discharge Pipe-SF	9306115005	9306115005	
674	Tapping Screw (Special)	9305848010	9305848010	
688	Screw (with Square Washer)	313681304205	313681304205	
815	Terminal-2P	9306489014	9306489014	
820	Capillary Joint-BC Assy	9306134006	9306134006	
916	Noise Insulation-G	9306098001	9306362003	
935-1	Reinforcement (Cabinet Top)	9305973002	9305973002	
935-2	Reinforcement-F (Cabinet Top)	9306123000	9306123000	
942-1	Control Box Cover-A Metal	9308562012	9308562012	
942-2	Control Box Cover-B Metal	9305975006	9305975006	
982	Cord Clamp (Plastic, Black)	9302271002	9302271002	
A	Screw (with Inner Washer)	9357297002	9357297002	
B	Screw (with Spring Washer)	0700179013	0700179013	

Ref. No.	Description	Part No.		Ord. Q'ty
		AOY9RSGC	AOY12RSGC	
4	Emblem-Rear	9306337001	9306337001	
5	Cabinet Front Panel, Plastic	9305525010	9305525010	
7	Connector Cover (Cabinet)	9306119010	9306119010	
9	Cabinet Rear Panel, Plastic	9305526017	9305526017	
12	Base Assy, Painted	9306118020	9306118020	
13	3-Way Valve	9306801014	9306802011	
14	2-Way Valve	9306800017	9306800017	
16	Condenser Assy	9306477004	9306482008	
18	Suction Pipe	9307931000	-----	
20	Discharge Pipe Assy	9307035012	9307036019	
26-6	BR Sheet 100x120xT5	9305039029	-----	
26-7	BR Sheet 30x120xT7	9305039036	9305039036	
26-8	BR Sheet 65x170xT2	9305490011	-----	
26-9	BR Sheet 180x180xT2	-----	9305039067	
26-10	BR Sheet 100x160xT5	-----	9305039074	
26-11	BR Sheet 50x190xT3	9300389068	9300389068	
32	Control Box Metal	9305972005	9305972005	
34	Capacitor (Fan Motor)	9700468097	9700468097	
37	Capacitor (Running)	9306512019	9306512019	
38	Clamp Metal (Capacitor)	313468061808	313468061808	
39	Propeller Fan	9305538003	9305538003	
41	Fan Motor	9307095016	9306402013	
42	Bracket (Motor)	9305536016	9305536023	
46	Compressor Assy	9308997005	9310712023	
51	Special Nut M5	313199233602	313199233602	
55	Special Nut M8	313252257701	313252257701	
62	Wire Assy (Shield)-A	9305971026	9305971026	
98	Fan Ring	9305581023	9305581023	
107	Rubber Seat-A	9307092008	9351813017	
109	Terminal Cover (Comp.)	9307090004	9351120009	
138	Separate Wall	9305971008	9305971008	
187	Clamp No. 1219	313361271706	313361271706	
195	Clamp SKB-100	313361275805	313361275805	
196	Clamp SKB-150	313035356905	313035356905	
196-2	Clamp SKB-3MC	9305335008	9305335008	
300	Suction Pipe-C Assy	-----	9307932007	
329	Coupling Pipe Assy	9306400002	-----	
329-2	Coupling Pipe-C	9306433000	9306442002	
343	Solenoid Coil	9360538031	9360538031	
344	4-Way Valve	9307555015	9307556012	
365	Bracket (Valve)	9306748012	9306748012	
412	Terminal Gasket (Comp.)	9307089008	9351121006	
420	Capillary Assy (Check Valve)	9308960009	9308325006	
423	Noise Insulation-F	9306424008	9306424008	
620	Inlet Pipe Assy	-----	9306394004	
674	Tapping Screw (Special)	9305848010	9305848010	
688	Screw (with Square Washer)	313681304205	313681304205	
765	Drain Pipe	9301102000	9301102000	
766	Drain Pipe Packing	9301143003	9301143003	
815	Terminal-4P	9306488017	9306488017	
916	Noise Insulation-G	9306362003	9306362003	
935-1	Reinforcement (Cabinet Top)	9305973002	9305973002	
935-2	Reinforcement-F (Cabinet Top)	9306123000	9306123000	
942-1	Control Box Cover-A Metal	9308562012	9308562012	
942-2	Control Box Cover-B Metal	9305975006	9305975006	
946	Inlet Pipe	9306401009	-----	
982	Cord Clamp (Plastic, Black)	9302271002	9302271002	
984	U Pipe (Y) D9.52	-----	9305523009	
A	Screw (with Inner Washer)	9357297002	9357297002	
B	Screw (with Spring Washer)	0700179013	0700179013	

STANDARD ACCESSORIES

Name and Shape	Part No.			
	ASY9ASGCW	ASY9RSGCW	ASY12ASGCW	ASY12RSGCW
Wall hook bracket 	930458008	930458008	930458008	930458008
Wall cap-B 	313714296205	313714296205	313714296205	313714296205
Remote control unit 	9307113048	9307113055	9307113048	9307113055
Remote control holder case 	9305642014	9305642014	9305642014	9305642014
Battery (penlight) 	313187358304	313187358304	313187358304	313187358304
Cloth tape 	9304232001	9304232001	9304232001	9304232001
Seal-A 	_____	_____	9304536000	9304536000
Cable mark 	_____	9301385007	_____	9301385007
Tapping screw (big) (ø4 x 20) 	301141164200	301141164200	301141164200	301141164200
Tapping screw (small) (ø3 x 12) 	301141533125	301141533125	301141533125	301141533125
Hexagon wrench 	9351228019	9351228019	9351228019	9351228019
Drain pipe (Including drain packing) 	_____	9303029015	_____	9303029015

