

CONTENTS

1. Precaution	2
2. Specification	3
3. Wiring diagram	4
4. Structure and parts name	5
5. Function of main components	7
6. Trouble shooting guide	8
7. How to disassemble	10
8. Refrigerant cycle	11
9. Exploded diagram and parts list	12

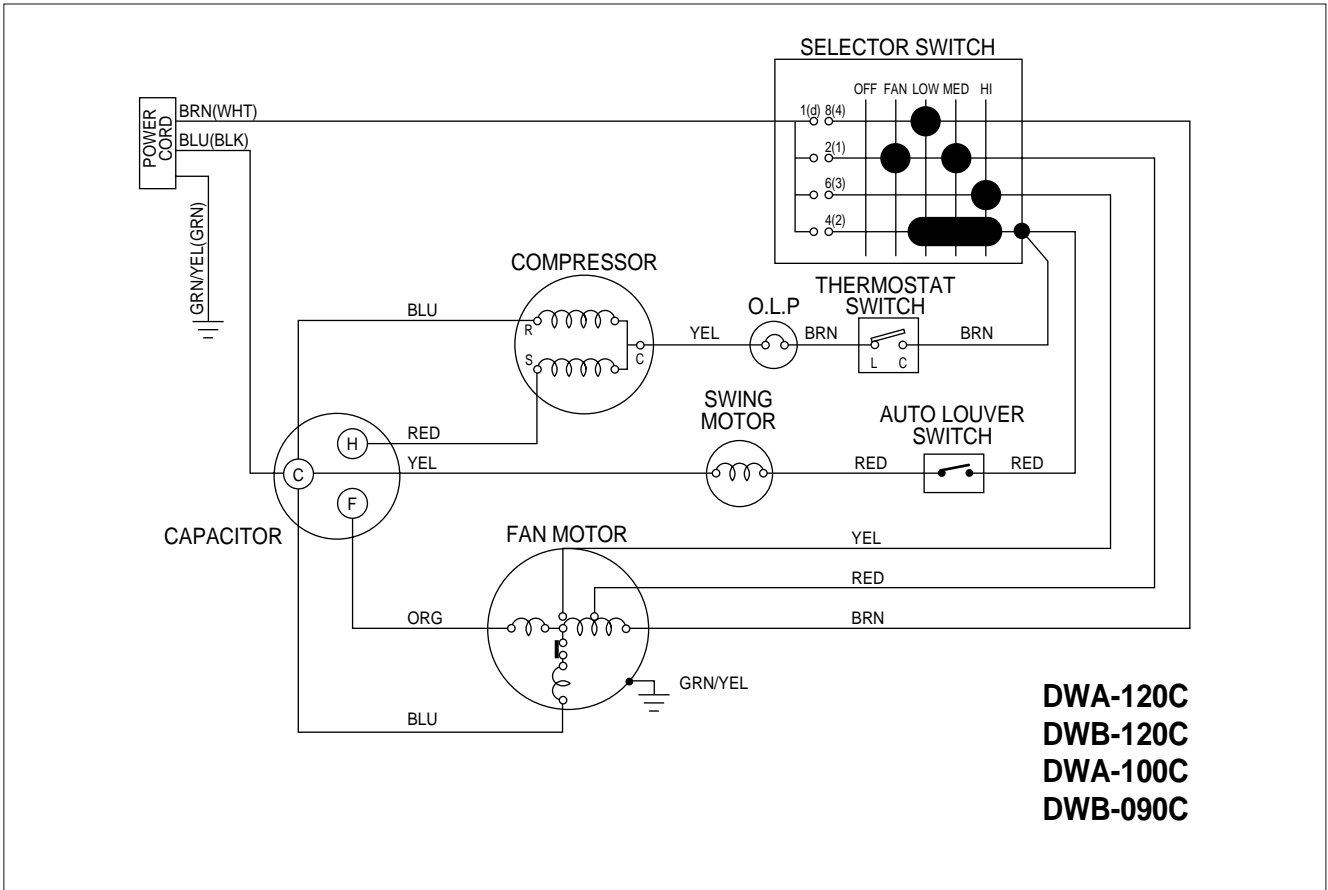
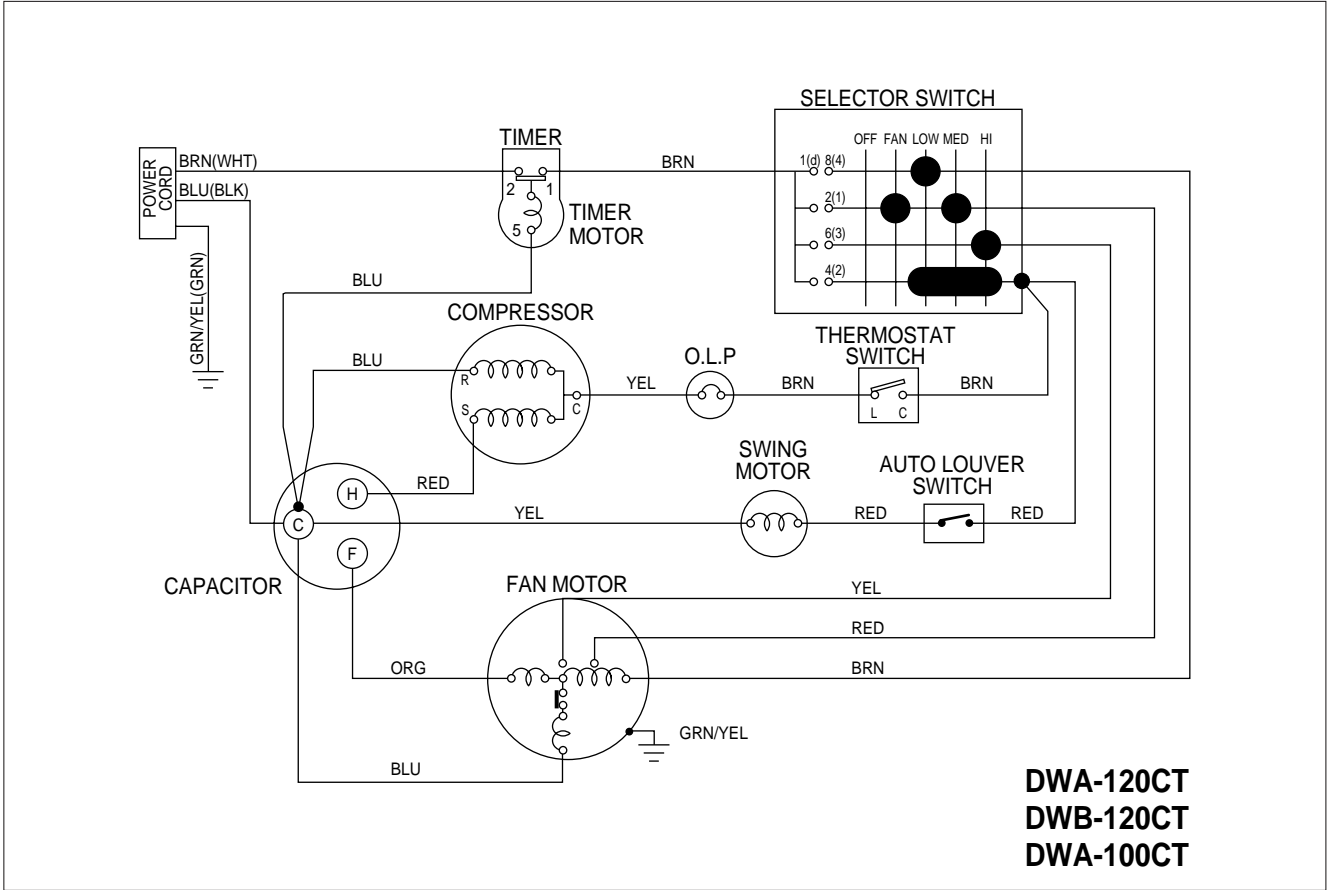
1.PRECAUTION

1. Turn off unit.
 - Make sure the unit is off and the AC cord is unplugged before repairing or servicing
2. In case of checking the circuit unavoidably while the unit is connected with power source, be careful not to connect with the part of electric charge.
you may cause electric shock.
3. Use of proper part if you need to replace the part, be sure to use genuine part of servicing model.
(Do not repair or replace the electric contact part, replace it. Consumer must not repair the unit, because it is dangerous.)
4. Use of proper tool.
 - You must use the proper tool to repair the unit, and use the measuring appliance adjusted accurately.
5. Damage of electric wire and power cord when servicing.
 - Check electric wire and a surely replace a damage electric wire and a damage power cord.
6. Never use connecting the middle of a wire, after cutting the middle of a wire,
 - It may cause a fire and trouble.
7. Checking the insulation resistance.
 - After you complete the assembly of the unit, surely check the insulation resistance. Confirm that the insulation resistance of the power line and the ground terminal is over $30M\Omega$ by measuring insulation ohmmeter.
8. Checking the ground.
 - After checking the ground, servicing it completely.
9. Checking the installation.
 - After checking the installation, servicing it completely.
10. Care children.
 - When servicing, do not make the children approach the air-conditioner.

2.SPECIFICATION

MODEL		DWA-120C	DWB-120C	DWA-100C	DWB-090C	DWA-120CT	DWB-120CT	DWA-100CT	
Function		Cooling							
Power		AC 208V~230V 1ø 60Hz	AC 220V~240V 1ø 50Hz	AC 208V~230V 1ø 60Hz	AC 220V~240V 1ø 50Hz	AC 208V~230V 1ø 60Hz	AC 220V~240V 1ø 50Hz	AC 208V~230V 1ø 60Hz	
Capacity	W	3,510	3,510	2,930	2,640	3,510	3,510	2,930	
	BTU/H	12,000	12,000	10,000	9,000	12,000	12,000	10,000	
Dehumidification		l/H	1.5	1.5	1.3	1.2	1.5	1.5	
Electrical Data	Power Input	W	1,280	1,280	1,100	900	1,280	1,280	1,100
	Running Current	A	6.1	6.5	5.0	4.1	6.1	6.5	5.0
	Starting Current	A	30	34	29	24	30	34	23
Compressor	Type	Rotary							
	Model	RCA120A	RCB120A	RCA100A	RCB090A	RCA120A	RCB120A	EAB090111A	
	Capacitor	30uF/370VAC	25uF/370VAC	25uF/370VAC	25uF/370VAC	30uF/370VAC	25uF/370VAC	15uF/370VAC	
Refrigerant (R-22)		870g	880g	870g	820g	870g	880g	680g	
Air Filter		WASHABLE							
FAN (Indoor side)		BLOWER FAN							
FAN (Outdoor side)		PROPELLER FAN							
Dimension	Unit W ; H ; D	mm	560 ; 385 ; 605						
	Packing W ; H ; D	mm	631 ; 474 ; 700						
& Weight	Net Weight	kg	43	43	41	42	43	43	40
	Gross Weight	kg	48	48	46	47	48	48	45

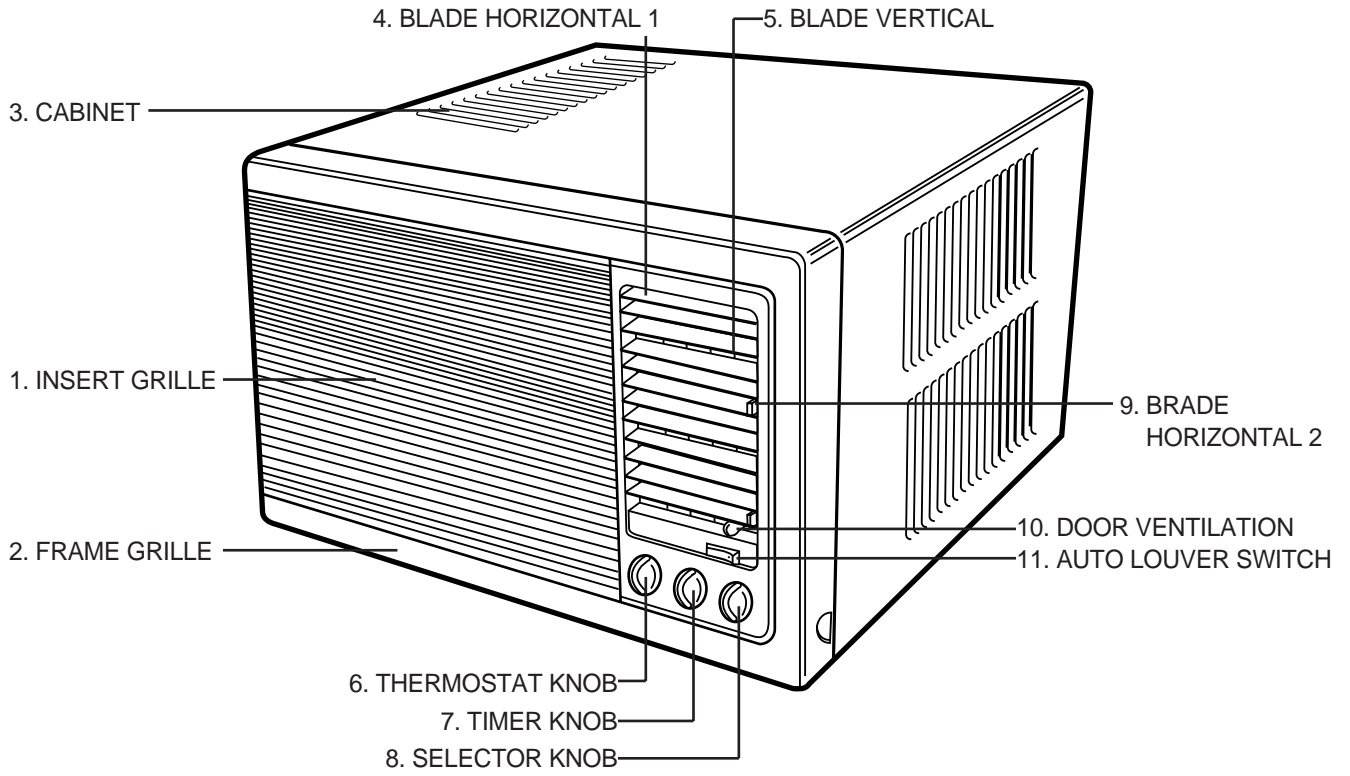
3.WIRING DIAGRAM



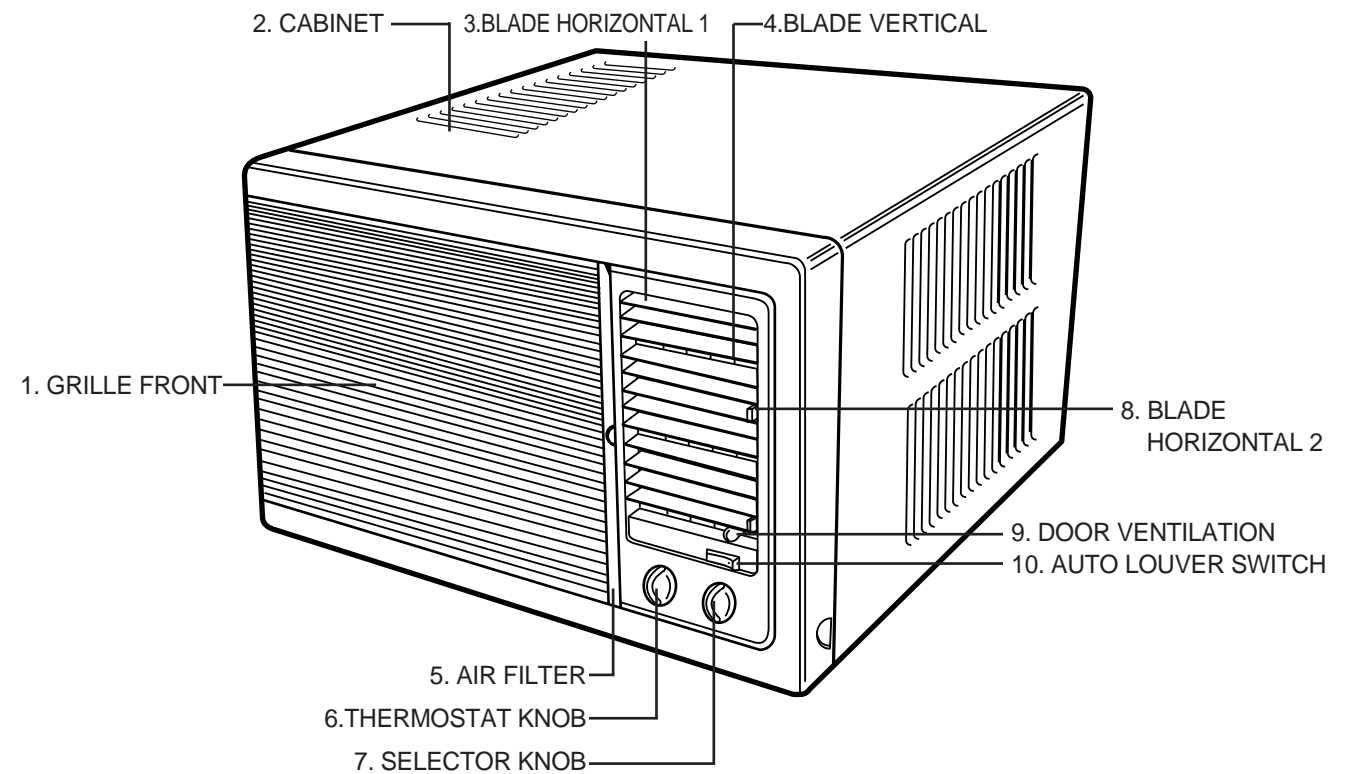
4.STRUCTURE AND PARTS NAME

1. EXTERNAL STRUCTURE AND PARTS NAME

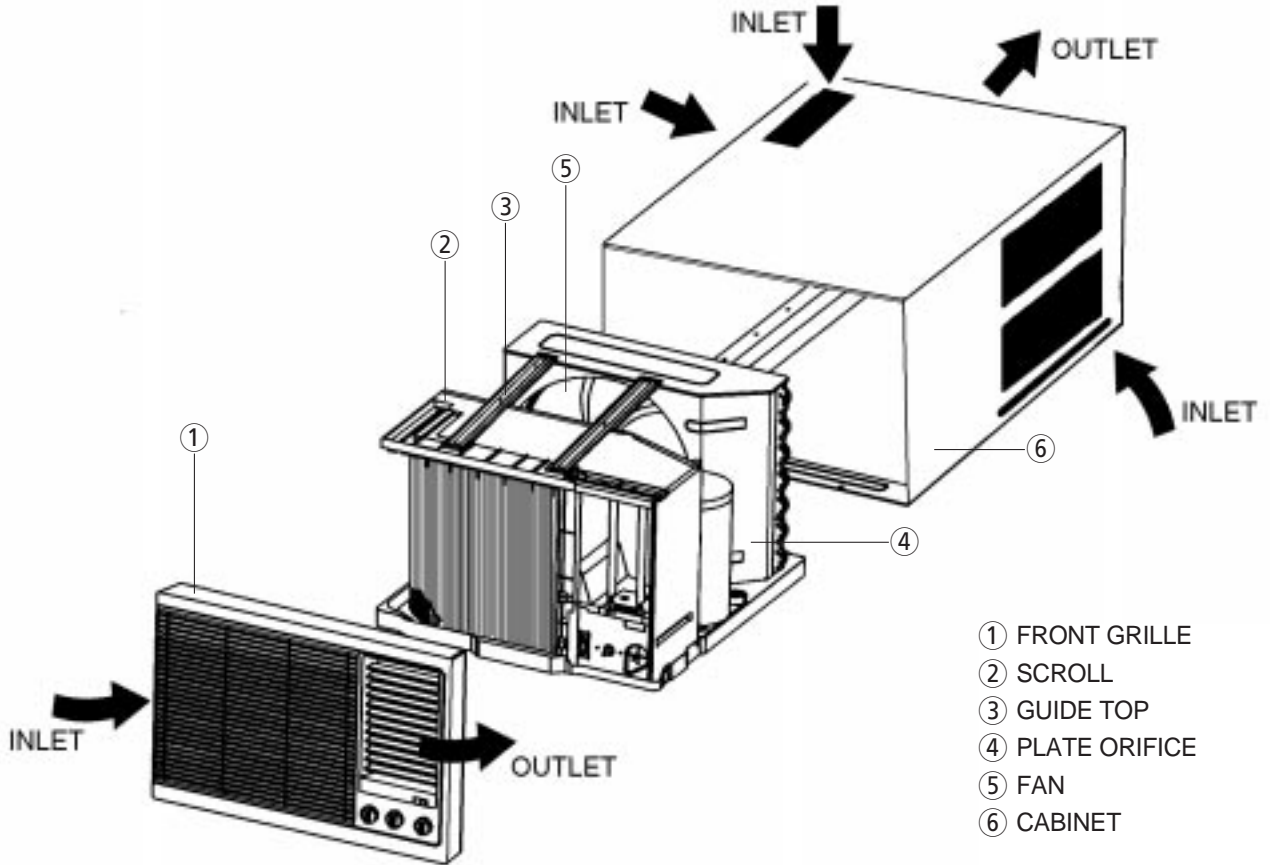
• DWA-120CT/DWB-120CT/DWA-100CT



• DWA-120C/DWB-120C/DWA-100C/DWB-090C



2. INTERNAL STRUCTURE AND PARTS NAME



5.FUNCTION OF MAIN COMPONENTS

1. THERMOSTAT

The thermostat automatically starts and stops the operation in order to keep the room temperature at a proper level. and this results in efficient use of power and economical cooling.

2. TIMER (Only DWA-120CT/DWB-120CT/DWA-100CT)

The Timer operation is set by means of the Knob.

TO RELEASE THE TIMER OPERATION.

Turn the timer Knob clockwise and set at continue position. Air conditioner will start normal operation.

TO TURN OFF THE AIR CONDITIONER DURING THE TIMER OPERATION

Set the timer Knob at off position. If the timer Knob is set at a position other than continue, air conditioner is in timer operation when restarting.

TO CHANGE THE TIMER OPERATION

Set the timer at a desired time. The timer will operate from now to the newly set time.

3. ROTARY SWITCH (SELECTOR)

- ⌋ OFF : This position stops all operations of the air conditioner.
- ⌋ HIGH COOL : This position provides the maximum air flow for rapid cooling, dehumidifying and dust removing operations (use this position on sultry summer days)
- ⌋ MEDIUM COOL : This position provides the medium air flow for moderate cooling.
- ⌋ LOW COOL : This position provides the minimum air flow for quiet cooling and dehumidifying operations. (Suifable for night-time)
- ⌋ FAN : This position provides fan operation alone for circulation and dust removal from room air.

4. AUTO LOUVER SWITCH

When the auto louver switch is turned to "ON" position, two vertical louvers automatically move right and left. Thus, you can obtain comfortable cooling. The vertical louvers may be stopped at any position when the auto louver switch is turned off.

5. VENT

Brings outside air into room.

6. MOTOR

The motor is used to rotate the indoor and outdoor fan so that the room air can be recirculated.

7. FAN

- ⌋ Blower : The blower draws hot air from the room through the evaporator and then discharges it back into the room after changing it into the cool air. It circulates the room air.
- ⌋ Propeller : The propeller draws outdoor air through chassis and cools the condenser and then blows the hot air out.

8. CAPACITOR

The capacitor enlarges the difference of phase between main coil and sub coil so that the compressor and Fan Motor starts well.

9. ACCUMULATOR

The accumulator blocks the inflow of liquid refrigerant & impurities into the compressor.

6.TROUBLE SHOOTING GUIDE

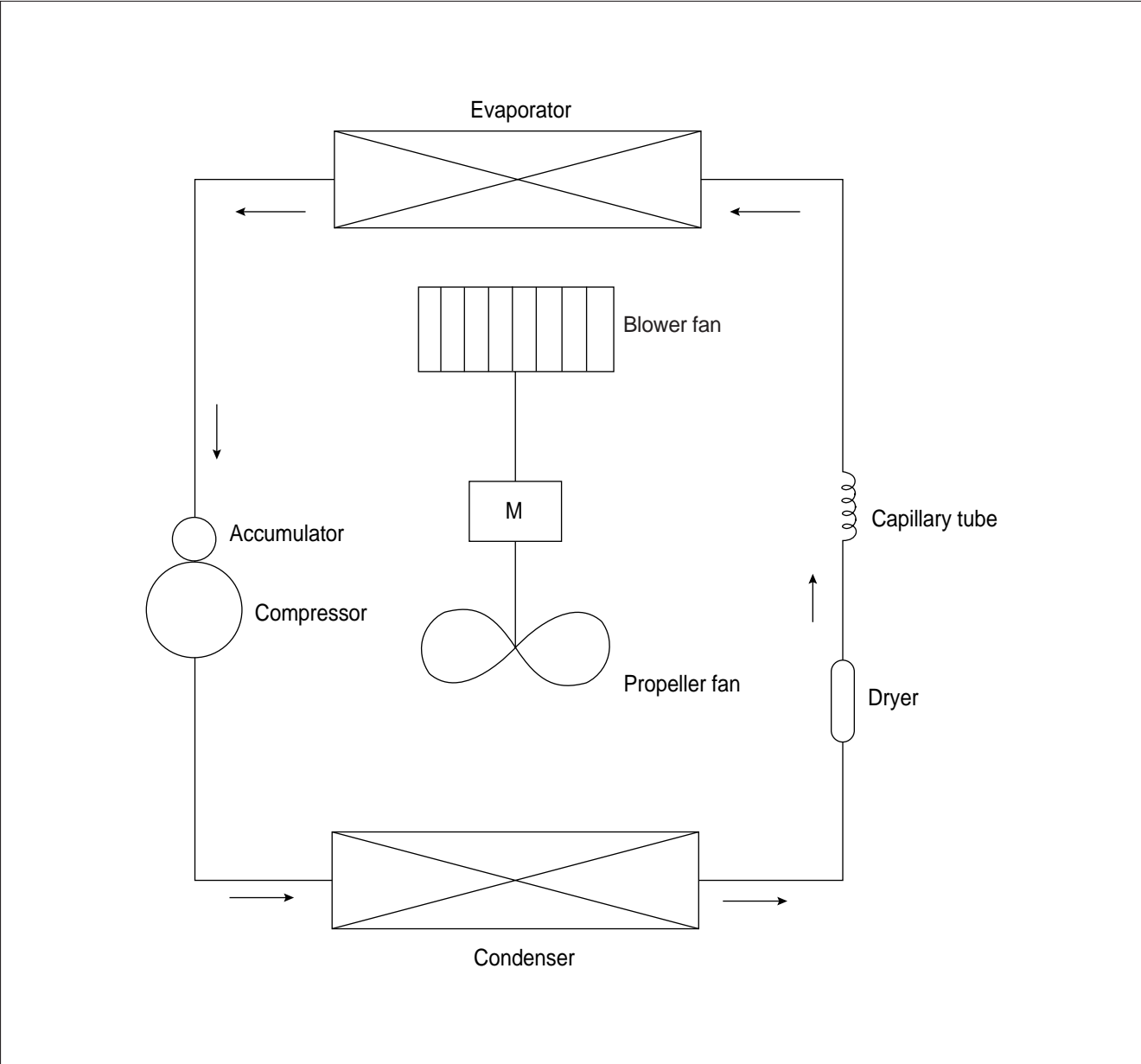
Trouble	Situation	Analysis	Cause	Remedy
Fan motor and compressor do not run	1. Power failure	<ul style="list-style-type: none"> 1) Power plug 2) Circuit breaker 	<ul style="list-style-type: none"> 1) Power failure 2) Circuit breaker is tripped 3) Power plug is not contacting 	<ul style="list-style-type: none"> ⌋ Consult your electric company ⌋ In case of a breaker, turn it on and off a few times ⌋ Replace the power plug
	2. Power is supplied, but the equipment does not run	<ul style="list-style-type: none"> 1) Receptacle 2) Operation switch 3) Cord or lead wire to the switch 4) Timer 	<ul style="list-style-type: none"> ⌋ Disconnection ⌋ Mechanical failure of switch 1) Disconnection 2) Malfunction of contact 	<ul style="list-style-type: none"> ⌋ Repair or replace the receptacle ⌋ Replace the cord or lead wire
Switch is in "cool" position but the compressor does not run	1. Not operating at all	<ul style="list-style-type: none"> 1) Compressor 2) Thermostat 	<ul style="list-style-type: none"> ⌋ Disconnection or burned-out 1) Failure 2) Malfunction 3) Knob is not set to the proper setting 	<ul style="list-style-type: none"> ⌋ Replace the compressor or connection wire ⌋ Replace ⌋ Repair or replace ⌋ Turn knob for cooler setting
		<ul style="list-style-type: none"> 3) Selector switch 4) O.L.P 5) Capacitor 	<ul style="list-style-type: none"> ⌋ Failure of malfunction of contact 1) Disconnection 2) Malfunction of contact ⌋ Lack of capacity ⌋ Disconnection 	<ul style="list-style-type: none"> ⌋ Repair or replace the switch ⌋ Repair ⌋ Repair or replace ⌋ Replace ⌋ Repair
	2. Compressor	<ul style="list-style-type: none"> 1) Electricity 2) Room temperature and outside temperature 3) Compressor 4) O.L.P 5) Capacitor 	<ul style="list-style-type: none"> 1) The voltage exceeded allowed range DWA-XXX (253V-187V) DWB-XXX (264V-198V) 2) Capacity of wire is not sufficient ⌋ Extremely high ⌋ Burned-out ⌋ Malfunction ⌋ Lack of capacity 	<ul style="list-style-type: none"> ⌋ Consult your electric company ⌋ Check the capacity of wire ⌋ Ventilate well and remove the heat source ⌋ Replace ⌋ Replace ⌋ Replace
3. Frequent start and stop	<ul style="list-style-type: none"> 1) Thermostat 2) Capacitor 3) O.L.P 	<ul style="list-style-type: none"> ⌋ Malfunction ⌋ Lack of capacity ⌋ Malfunction 	<ul style="list-style-type: none"> ⌋ Replace ⌋ Replace ⌋ Replace 	

Trouble	Situation	Analysis	Cause	Remedy
The compressor runs but the motor doesn't run		1) Fan 2) Fan motor 3) Capacitor 4) Fan motor circuit	<ul style="list-style-type: none"> ⌋ Blocked by others ⌋ Disconnection or burned-out electric cord ⌋ Failure malfunction of contact ⌋ Disconnection of malfunction of contact 	<ul style="list-style-type: none"> ⌋ Repair ⌋ Replace the fan motor ⌋ Replace ⌋ Check the circuit
Both fan motor and compressor are running but cooling is bad	Not cooling at all	Refrigerant system	1) Refrigerant system is choked 2) Compressor failure 3) Leakage of refrigerant gas	<ul style="list-style-type: none"> ⌋ Repair ⌋ Repair ⌋ Recharge refrigerant gas
	Insufficient cooling	1) Refrigerant system 2) Filter 3) Heat exchanger of condenser	1) Refrigerant system is choked 2) Compressor failure 3) Leakage of refrigerant 4) Refrigerant charge is too high <ul style="list-style-type: none"> ⌋ Clogged up with dust 1) Fin is clogged up with dust 2) The ventilation is not good 3) The unit is exposed to the sunlight 4) Other heat source is added in the room	<ul style="list-style-type: none"> ⌋ Check and repair refrigerant system ⌋ Replace ⌋ Check part of gas Leakage and repair ⌋ Repair and recharge ⌋ Clean the air filter ⌋ Clean the unit ⌋ Shade the unit from the sunlight ⌋ Remove the added heat source
Vibration & Noise		1) Installation place 2) Fan 3) Fixing screws 4) Electric components	<ul style="list-style-type: none"> ⌋ Installation of the unit is imperfectly done 1) Fan is contacted with obstacles 2) Fixing bolt ⌋ Have a screw loose ⌋ Electrical noise 	<ul style="list-style-type: none"> ⌋ Install the unit perfectly ⌋ Remove obstacles ⌋ Tighten the bolt ⌋ Tighten the screw ⌋ Exchange the components
Water leakage into room		<ul style="list-style-type: none"> ⌋ Installation condition 1) Each wiring	<ul style="list-style-type: none"> ⌋ Mounting chassis does not slant property to outside. The front is lower than rear side 	<ul style="list-style-type: none"> ⌋ Make rear side of the unit lower than the front
Electric shock (Leakage of current)		<ul style="list-style-type: none"> ⌋ Insulation of components 	1) Insulation defect of wiring and lead wire 2) Leakage of current due to the dew or rust <ul style="list-style-type: none"> ⌋ Insulation defect 	<ul style="list-style-type: none"> ⌋ Replace the defective parts ⌋ Replace the defective parts ⌋ Replace the defective parts

7.HOW TO DISASSEMBLE

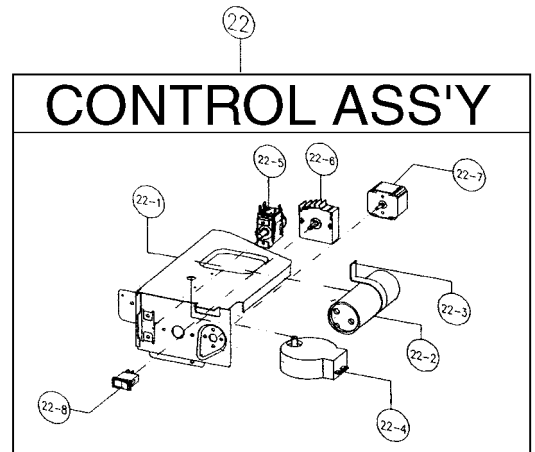
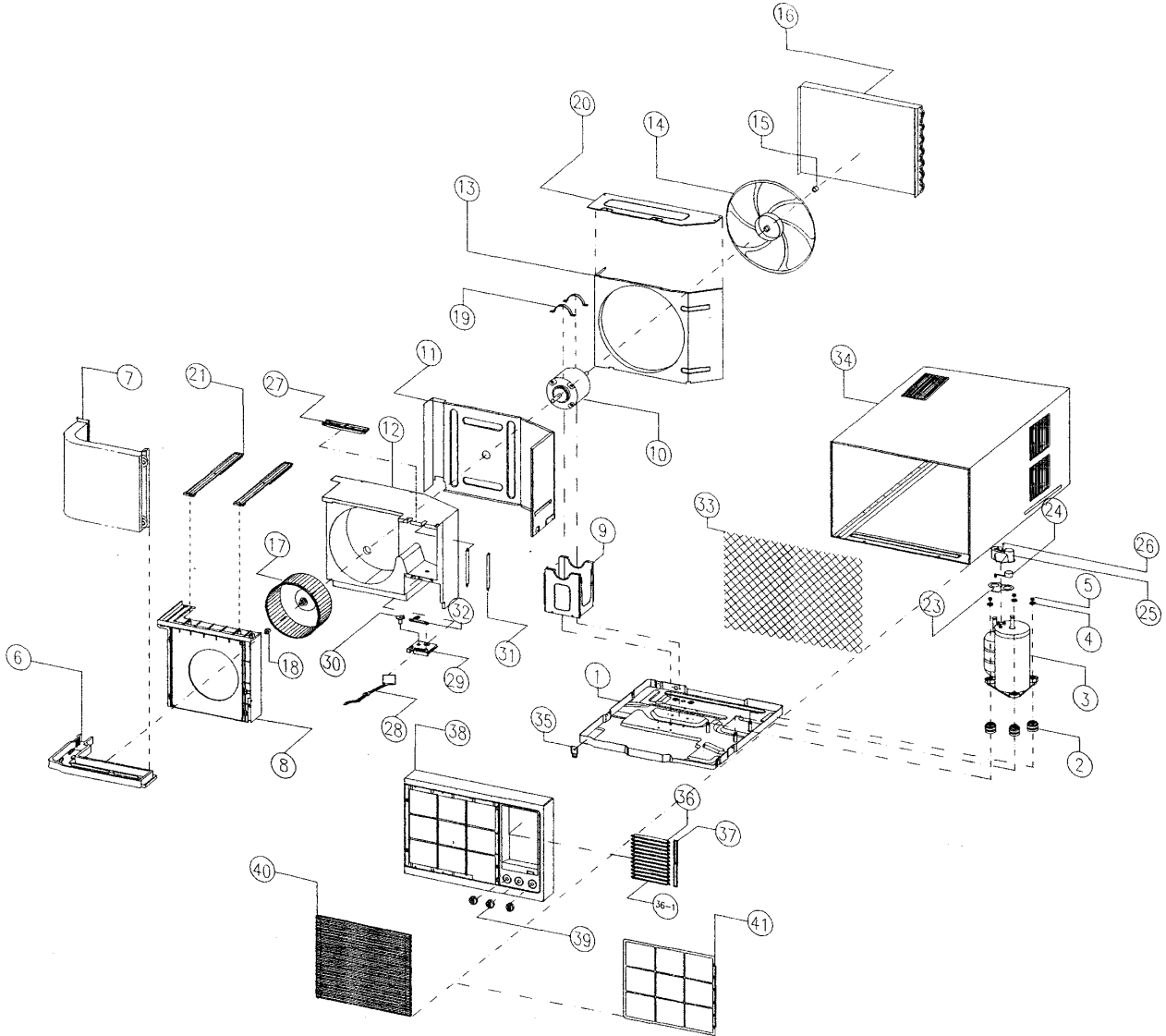
1	Before service of any part	<ol style="list-style-type: none"> 1. Stop the unit, remove the power cord from the receptacle. 2. Remove the Frame Grille from the main unit. 3. Remove the Cabinet from the main unit
2	Fan Motor	<ol style="list-style-type: none"> 1. Remove Frame Grille. <ul style="list-style-type: none"> - Remove 2 or 3 Knobs. 2. Remove Vent Lever. 3. Remove Auto Louver. 4. Remove wires. 5. Remove Control Box. 6. Remove Guide Top <ul style="list-style-type: none"> - Remove 6 screws. 7. Remove Panel Housing. <ul style="list-style-type: none"> - Remove 5 screws 8. Remove cover orifice <ul style="list-style-type: none"> - Remove 4 screws 9. Remove clamp Motor. <ul style="list-style-type: none"> - Remove 4 screws 10. Remove Panel Housing, Scroll, Fan Motor and Cond. Orifice assembly from Main unit. 11. Remove Blower Fan <ul style="list-style-type: none"> - Remove 1 hex-nut 12. Remove Propeller Fan <ul style="list-style-type: none"> - Remove 1 hex-nut 13. Remove Scroll. 14. Remove Panel Housing. 15. Remove Orifice Cond.
3	Control Box	<ol style="list-style-type: none"> 1. Same as the procedure 1 to 5 in disassembling Fan Motor.

8.REFRIGERANT CYCLE



9. EXPLODED DIAGRAM AND PARTS LIST

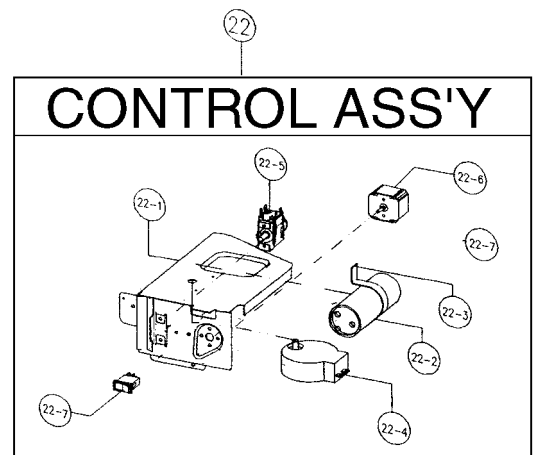
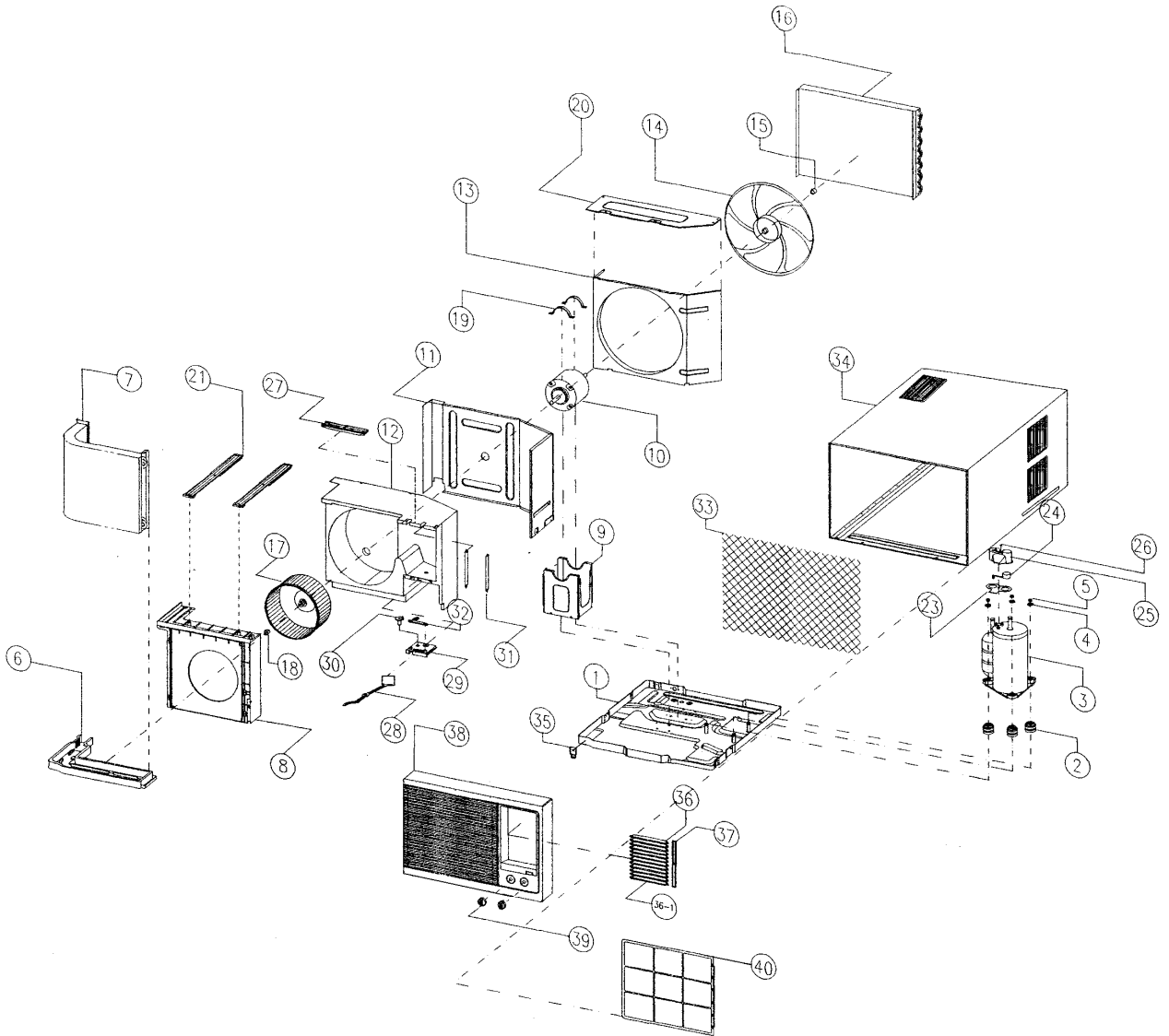
§ EXPLODED DIAGRAM (DWA-120CT/DWB-120CT/DWA-100CT)



§ PARTS LIST (DWA-120CT/DWB-120CT/DWA-100CT)

NO	PART NAME	PART CODE			QTY	REMARK
		DWA-120CT	DWB-120CT	DWA-100CT		
1	PAN BASE AS	3100000510			1	
2	GROMMET	3108104AE0		3108100700	3	
3	COMPRESSOR AS	3100030DE0	3100030CE0	3100032300	1	
4	WASHER PLAIN	7400208411		3106001300	3	
5	NUT LOCK	7392801211		3106001400	3	
6	PAN DRAIN	3108100200			1	
7	EVAPORATOR AS	3100007200			1	
8	PLATE SCROLL	3104501000			1	
9	BRACKET MOTOR	3100601500			1	
10	FAN MOTOR	3108000720	3108000610	—	1	DMI
		—	—	3108001000	1	SUNG SHIN
11	PANEL HOUSING	3104200800			1	
12	SCROLL	3106600100				
13	PLATE ORIFICE	3104500900			1	
14	FAN PROPELLER	3101800400			1	
15	NUT HEX (R)	3106000500			1	
16	CONDENSER AS	3100007300			1	
17	FAN BLOWER	3101800300			1	
18	NUT HEX (L)	3106000400			1	
19	CLAMP MOTOR	3101200500			2	
20	COVER ORIFICE	3101401500			1	
21	GUIDE TOP	3102500500			2	
22	CONTROL AS	3100001900			1	
22-1	BOX CONTROL	3100502300			1	
22-2	CAPACITOR	3109500210	3109500510	3109501010	1	
22-3	CLAMP CAPACITOR	3101200600			1	
22-4	MOTOR SWING	3966310100			1	
22-5	THERMOSTAT S/W	5SM0101600			1	
22-6	TIMER	3109600200	3109600100	3109600200	1	
22-7	ROTARY S/W	5S10405600 / 5S10405610			1	
22-8	ROCKER S/W	5S20101600			1	
23	TERMINAL GASKET	3102334AE0		3102300200	1	
24	OVER LOAD PROTECT	3107938UE0	3107938DE0	3107900300	1	
25	TERMINAL COVER	3101405AE0		3101403300	1	
26	FLANGED NUT HEX	3108009AE0		3106001500	1	
27	HOLDER V/BLADE	3103001600			1	
28	DOOR VENT	3101700100			1	
29	BRACKET V/BLADE	3100601600			1	
30	CAM	3106700200			1	
31	BLADE VERTICAL	3106500500			2	
32	BARVER CONN	3106300600			1	
33	GRILLE COND	3102401600			1	
34	CABINET	3101100100			1	
35	LOCK UNIT	3103800200			1	
36	BLADE HOR1	3106500600			10	
36-1	BLADE HOL2	3106500700			2	
37	BAR HOL CON	3106300700			1	
38	GRILLE FRAME	3102401200			1	
39	KNOB	3103400100			1	
40	GRILLE INSERT	3102401300			1	

§ EXPLODED DIAGRAM (DWA-120C/DWB-120C/DWA-100C/DWB-090C)



NO	PART NAME	PART CODE				QTY	REMARK
		DWA-120C	DWB-120C	DWA-100C	DWB-090C		
1	PAN BASE AS	3100000510				1	
2	GROMMET	3108104AE0				3	
3	COMPRESSOR AS	3100030DE0	3100030CE0	3100030EE0	3100030FE0	1	
4	WASHER PLAIN	7400208411				3	
5	NUT LOCK	7392801211				3	
6	PAN DRAIN	3108100200				1	
7	EVAPORATOR AS	3100007200				1	
8	PLATE SCROLL	3104501000				1	
9	BRACKET MOTOR	3100601500				1	
10	FAN MOTOR	3108000720	3108000610	3108001700	3108001600	1	DMI
		3108001900	—	3108001000	3108000900	1	SUNG SHIN
11	PANEL HOUSING	3104200800				1	
12	SCROLL	3106600100				1	
13	PLATE ORIFICE	3104500900				1	
14	FAN PROPELLER	3101800400				1	
15	NUT HEX (L)	3106000400				1	
16	CONDENSER AS	3100007300				1	
17	FAN BLOWER	3101800300				1	
18	NUT HEX (R)	3106000500				1	
19	CLAMP MOTOR	3101200500				2	
20	COVER ORIFICE	3101401500				1	
21	GUIDE TOP	3102500500				2	
22	CONTROL AS	3100001950				1	
22-1	BOX CONTROL	3100502900				1	
22-2	CAPACITOR	3109500210	3109500510	3109500510	3109500510	1	DMI
		3109501700	—	3109500810	3109500810	1	SUNG SHIN
22-3	CLAMP CAPACITOR	310200600				1	
22-4	MOTOR SWING	3966310100				1	
22-5	THERMOSTAT S/W	5SM0101600				1	
22-6	ROTARY S/W	5S10405600				1	
22-7	ROCKER S/W	5S20101600				1	
23	TERMINAL GASKET	3102334AE0				1	
24	OVER LOAD PROTECT	3107938UE0	3107938DE0	3107938HE0	3107938JE0	1	
25	TERMINAL COVER	3101405AE0				1	
26	FLANGED NUT HEX	3108009AE0				1	
27	HOLDER V/BLADE	3103001600				1	
28	DOOR VENT	3101700100				1	
29	BRACKET V/BLADE	3100601600				1	
30	CAM	3106700200				1	
31	BLADE VERTICAL	3106500500				2	
32	BARVER CONN	3106300600				1	
33	GRILLE COND	3102401600				1	
34	CABINET	3101100100				1	
35	LOCK UNIT	3103800200				1	
36	BLADE HOR1	3106500600				10	
36-1	BLADE HOL2	3106500700				2	
37	BAR HOR CON	3106300700				1	
38	GRILLE FROUNT	3102401700				1	
39	KNOB	3103400100				1	
40	FILTER PRE	3101901000				1	

DAEWOO

Service Manual

Window Type

Room Air Conditioner

Model: DWA-120CT / DWB-120CT

DWA-100CT

DWA-120C / DWB-120C

DWA-100C / DWB-090C

