

TABLE OF CONTENTS

1. PRECAUTION	2
2. GENERAL SPECIFICATIONS.....	3
3. NAMES OF MAJOR COMPONENTS	4
4. FUNCTION OF MAIN COMPONENTS.....	5
5. GENERAL INFORMATIONS	6
6. CARE AND MAINTENANCE.....	7
7. TROUBLE SHOOTING GUIDE	8
8. HOW TO DISASSEMBLE	10
9. WIRING DIAGRAM	11
10. REFRIGERANT CYCLE	12
11. EXPLODED DIAGRAM AND PARTS LIST	13

1. PRECAUTION

Please observe the following instructions.

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.

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 wire, after cutting the middle of wire.

It may cause a fire and trouble.

7. Checking the insulation resistance.

After you complete the assembly of unit, surely check the insulation resistance.

Confirm that the insulation resistance of the power line and the ground terminal is over 30M Ω by measuring insulation resistance.

8. Checking the ground.

After checking the ground, servicing it completely.

9. Checking the installation.

After checking the installation, servicing it completely.

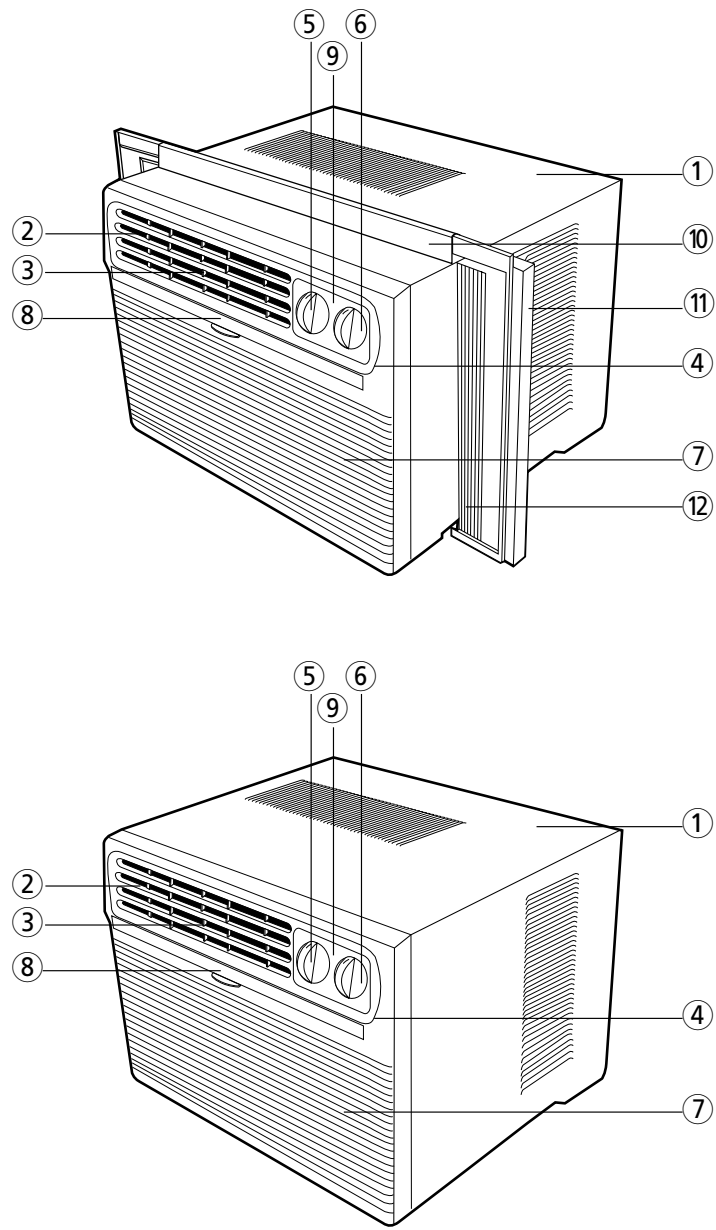
10. Care children.

When servicing, do not make the children approach the air-conditioner.

2. GENERAL SPECIFICATIONS

ITEM \ MODEL		DWC-052C	DWB-052C
Function		Cooling only	
Power source		AC 115V / 60Hz	AC 220-240V / 50Hz
Cooling Capacity	Btu/h	5,340 Btu/h	5,350 Btu/h
	Kcal/h	1,346 Kcal/h	1,348 Kcal/h
Energy Efficiency Ratio	Btu/Wh	10.2 Btu/Wh	10.3 Btu/Wh
	Kcal/Wh	2.57 Kcal/Wh	2.59 Kcal/Wh
Dehumidification	Pts/h	1.73 Pts/h	1.46 Pts/h
	g/h	787 g/h	662 g/h
Electrical Data	Power Input (W)	525 W	520 W
	Running Current (A)	4.6 A	2.4 A
Compressor	Type	Rotary	
	Model	RM5455GQ87	KH-091VFHC
	Capacitor	40 μ F / 370VAC	13 μ F / 400VAC
Fan Motor	Model	A9520KC030	A9520CC020
	Capacitor	4 μ F / 370VAC	2 μ F / 400VAC
	Indoor-Fan	Blower-Fan	
	Outdoor-Fan	Propeller-Fan	
Refrigerant(R-22)	Control	Capillary	
	Charge Amount(g)	13.3oz (380g)	14.7oz (420g)
Dimensions	Unit(W x H x D)	17.3(W) x 12.3(H) x 15.2(D) inch (440(W) x 313(H) x 385(D) mm)	
	PACKING(W x H x D)	19.2(W) x 15.4(H) x 17.4(D) inch (488(W) x 390(H) x 443(D) mm)	
Weight	Net Weight	45.4 lbs (20.6Kg)	46.3 lbs (21Kg)
	Gross Weight	48.5 lbs (22kg)	48.5 lbs (22kg)

3.NAMES OF MAJOR COMPONENTS



NO	PART NAME	NO	PART NAME
1	CABINET	7	AIR INTAKE
2	BLADE VERTICAL	8	AIR FILTER
3	COOL AIR DISCHARGE	9	CONTROL PANEL
4	GRILLE FRONT	10	PLATE WINDOW TOP
5	KNOB THERMOSTAT	11	FRAME WINDOW KIT
6	KNOB SELECTOR	12	SHUTTER WINDOW

* Window kits are optional.
(Item No. 10, 11, 12)

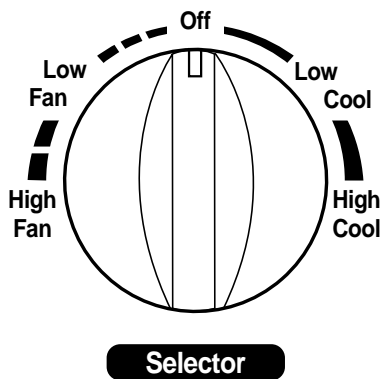
4. FUNCTION OF MAIN COMPONENTS

1. ROTARY SWITCH (SELECTOR)

Please refer to the part of selector in the chapter 9 (Wiring Diagram).

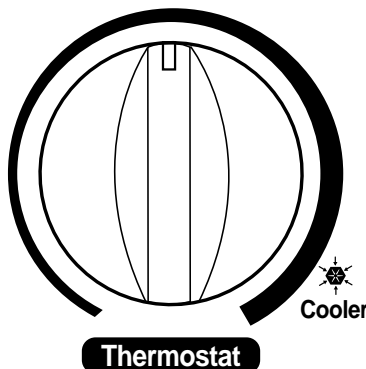
The rotary switch (selector) controls the fan motor's rotation speed, and has five positions.

The function of the five position is as follow.



- 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.)
- LOW COOL: This position provides the minimum air flow for quiet cooling, dehumidifying operations. (Use this position on suitable for night-time.)
- HIGH FAN: This position provides the maximum air flow alone fan operation without cooling operation.
- LOW FAN: This position provides the minimum air flow air flow alone fan operation without cooling operation.

2. THERMOSTAT (TEMPERATURE CONTROL)



- The Thermostat automatically starts and stops operation in order to keep the room temperature at a proper level, and this results in efficient use of power and economical cooling.
- Turn clockwise for a cooler room temperature.
- Turn counter-clockwise for a warmer room temperature.

3. MOTOR

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

4. FAN

- BLOWER FAN: The Blower draws hot air from the room through the Evaporator and then discharges it back into the cool air. It circulates the room air.
- PROPELLER FAN: The propeller draws outdoor air through louvering and cools Condenser, and then blows the hot air out.

5. CAPACITOR

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

6. ACCUMULATOR

The Accumulator blocks the unflow of liquid refrigerant and impurities into the Compressor.

5. GENERAL INFORMATION

1. CHANGING AIR FLOW DIRECTION

Air flow deflectors divert air from center flow to left or right.
Adjust deflectors for desired air flow pattern.

2. AIR FLOW AROUND UNIT

Check in door grill and outdoor louvers for air flow obstructions. Do not block air flow to and from unit. The outdoor coil should be checked and periodically cleaned for debris that may collect and block unit air flow. If air flow is obstructed or deflected back into unit, the compressor may cycle on and off rapidly, causing early compressor failure.

3. Electrical Grounding Instructions.

This appliance is equipped with a three-prong(grounding) plug for protection against possible shock hazards. If a two-prong wall receptacle is encountered, the customer is required to contact a qualified electrician and have the two-prong wall receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code.

4. USE OF EXTENSION CORDS

Because of potential safety hazards under certain conditions we strongly recommend against the use of an extension cord. However, if you still elect to use an extension cord, it is absolutely necessary that it is earthed and the marked rating of the extension cord should be 250V 10A or more for Model DWB-052C.

Also, it is absolutely necessary that it be a UL listed 3-wire grounding type appliance extension cord rated has a 3-blade grounding and 3-slot receptacle that will plug into appliance. The marked rating of the extension cord should be 125V 13A or more, for Model DWC-052C.

6. CARE AND MAINTENANCE

1. AIR FILTER

Clean the air filter, which removes dust inside the room.

It should be washed at least once every week during operation.

1. Remove the Air Filter from the front grill by pulling up.
2. Clean Air Filter with a vacuum cleaner or lukewarm, soapy water.
3. Shake it when clean to remove moisture completely. Replace it.

2. CLEANING THE AIR CONDITIONER

1. At least once a year, remove cabinet and thoroughly clean air conditioner. Have the unit inspected by an authorized servicer to ensure unit is functioning properly.
2. Wash air conditioner with lukewarm, soapy water as needed. Rinse and dry thoroughly.
3. If using concentrated liquid detergent, dilute in warm water first.
4. Front grill may be wiped off with a cloth dampened in a mild detergent solution.
5. Cabinet may be washed with mild soap or detergent and lukewarm water, then polished with liquid wax for appliances.
6. Condenser and Evaporator coils should be cleaned at the beginning of each cooling season. Use a soft brush or vacuum cleaner to clean them, making sure that the Condenser and Evaporator coils are not damaged.
7. Do not use abrasive cleaners. These items scratch, crack and discolor surfaces.

7. TROUBLE SHOOTING GUIDE

TROUBLE	SITUATION	ANALYSIS	CAUSE	REMEDY
Fan motor and compressor do not run	1. Power failure	1) Power plug 2) Circuit breaker	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	1) receptacle 2) Operation switch 3) Cord or lead wire to the switch	<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	1) Compressor 2) Thermostat 3) Selector switch 4) O.L.P 5) Capacitor	<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"> • Failure of malfunction of proper setting 1) Disconnection 2) Malfunction of contact <ul style="list-style-type: none"> • Lack of capacity • Disconnection 	<ul style="list-style-type: none"> • Replace the compressor or connection wire • Replace • Repair or replace • Turn knob for cooler setting • Repair or replace the swtting • Repair • Repair or replace • Replace • Repair
	2. Compressor	1) Electricity 2) Room temperature and outside temperature 3) Compressor 4) O.L.P 5) Capacitor	1) The voltage exceeded allowed range 2) Capacity of wire is not sufficient <ul style="list-style-type: none"> • 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	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

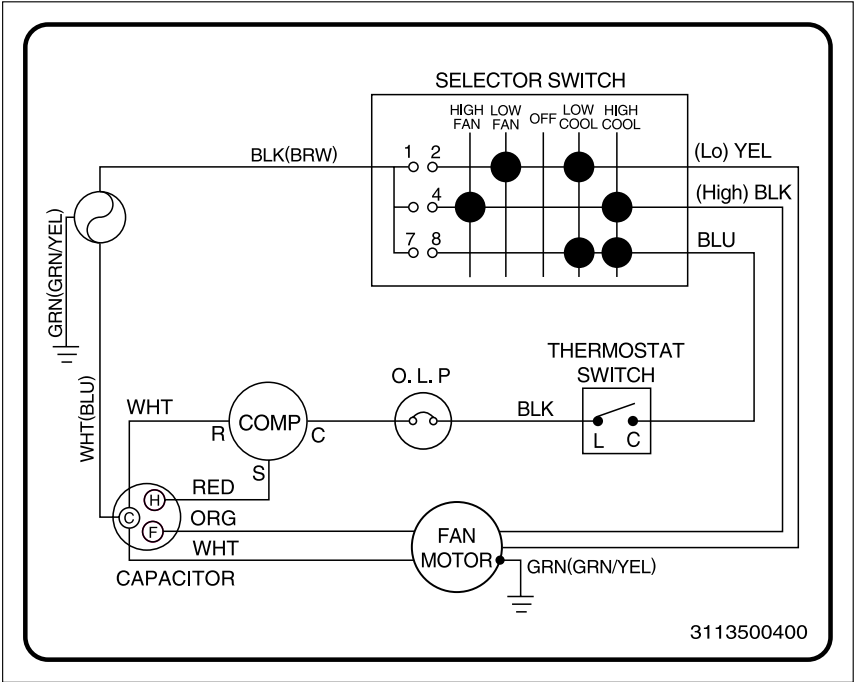
TROUBLE	SITUATION	ANALYSIS	CAUSE	REMEDY
The compressor runs but the motor doesn't run		1) Fan 2) Fan motor 3) Capacitor 4) Fan motor circuit	<ul style="list-style-type: none"> Blocked by others Disconnection or burned-out electric cord Failure malfunction of contact Disconnection of malfunction of contact 	<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 gas 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 a part of 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 <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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"> Check the unit's Leakage of current. Replace the defective parts or components

8. HOW TO DISASSEMBLE

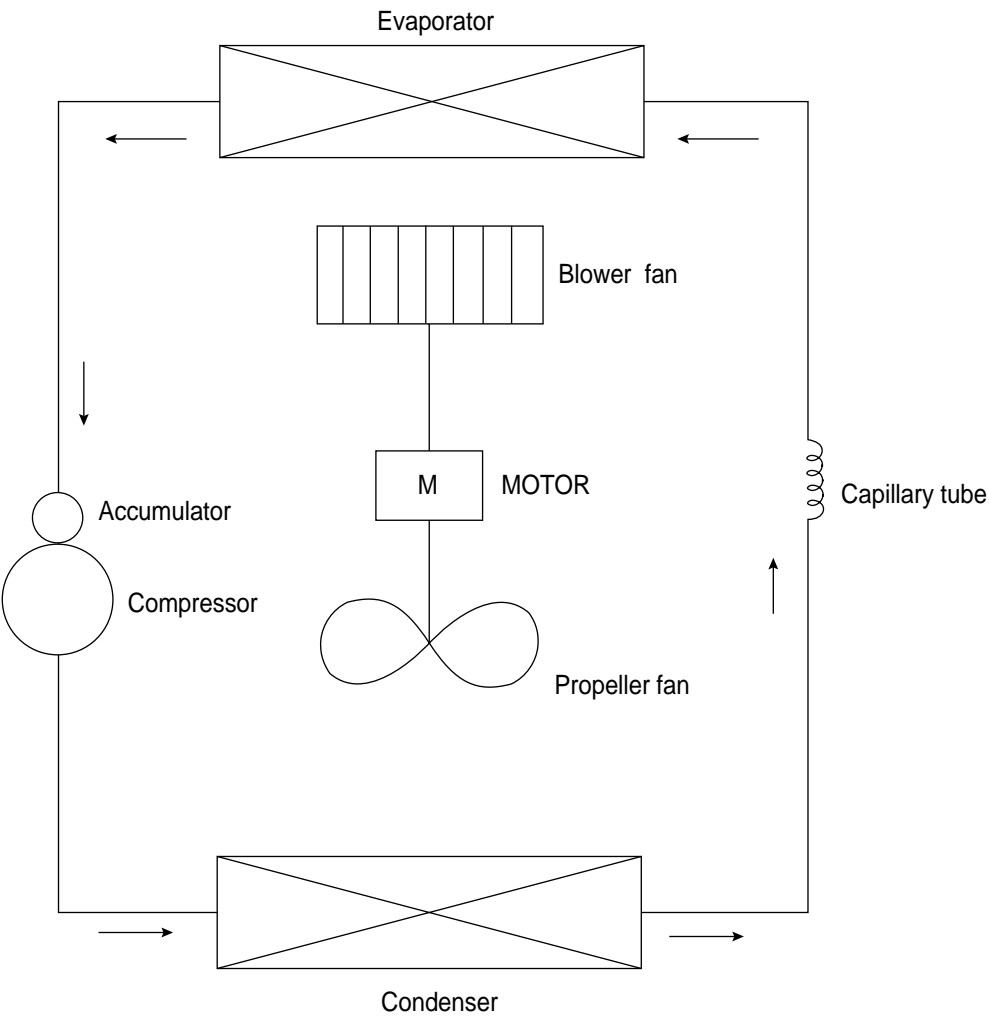
Please refer to the chapter 11 (Exploded diagram and parts list).

1	Before service of any part.	<ol style="list-style-type: none"> 1. Stop the unit, remove the power cord from the receptacles. 2. Move the unit to the safe location for the suitable work.
2	Ass'y Fan Motor - Fan Motor - Propeller Fan - Blower Fan	<ol style="list-style-type: none"> 1. Remove Front Grill <ul style="list-style-type: none"> - Remove Filter Pre. - Remove screw(1 point) in Front Grill. 2. Remove Cabinet from the unit. <ul style="list-style-type: none"> - Remove screws (8 point) from the unit's sides. 3. Remove Screw (1 point) from Panel Housing's Side and Remove Holder EVA. 4. Remove Ass'y Control Box <ul style="list-style-type: none"> - Remove screws (5 point). - Remove wires in the each components. 5. Remove Plate Scroll 6. Remove wires in the Panel Housing. 7. Remove screws (7 point) from Ass'y Fan Motor's sides. <ul style="list-style-type: none"> - Ass'y Fan Motor is assembly of Fan Motor, Propeller and Blower Fan, Orifice and Panel Housing. 8. Lift the Ass'y Fan Motor from the unit. 9. Remove Clip Fan (2 point) from the shaft of Fan Motor. 10. Remove Propeller Fan from the shaft of Fan Motor. 11. Remove Blower Fan from the shaft of Fan Motor. 12. Remove Scroll 13. Remove Fan Motor from Panel Housing. <ul style="list-style-type: none"> - Remove screws (4 point).
3	Ass'y Control Box - Rotary Switch (selector) - Thermostat - Capacitor - Power Cord	<ol style="list-style-type: none"> 1. Same as the procedure 1 to 4 in the Item 2.
4	O.L.P	<ol style="list-style-type: none"> 1. Same as the procedure 1 to 2 in the Item 2. 2. Remove Terminal Cover from Compressor. <ul style="list-style-type: none"> - Remove hex-nut (1 point).

9. WIRING DIAGRAM



10. REFRIGERANT CYCLE



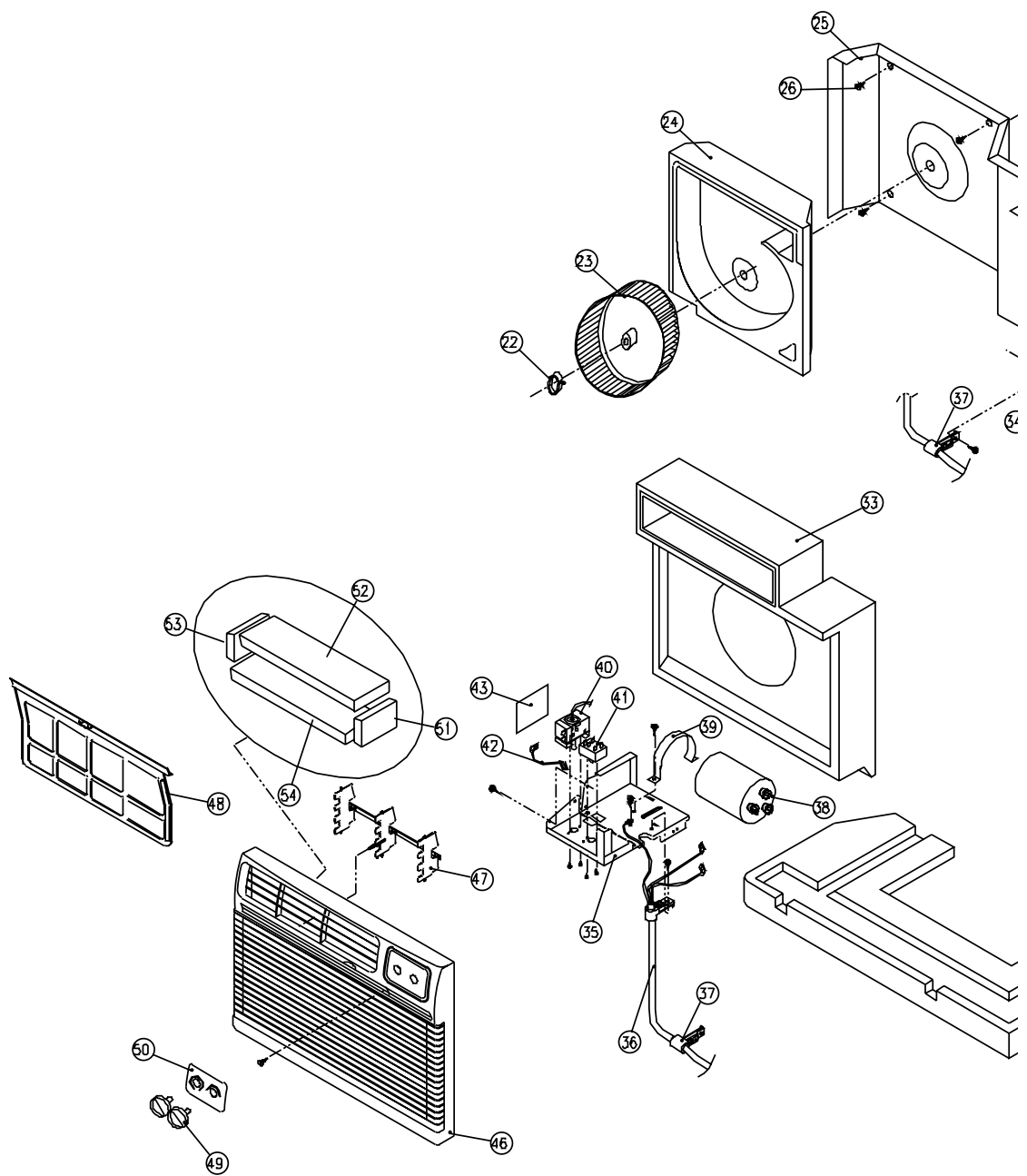
11. EXPLODED DIAGRAM AND PARTS LIST.

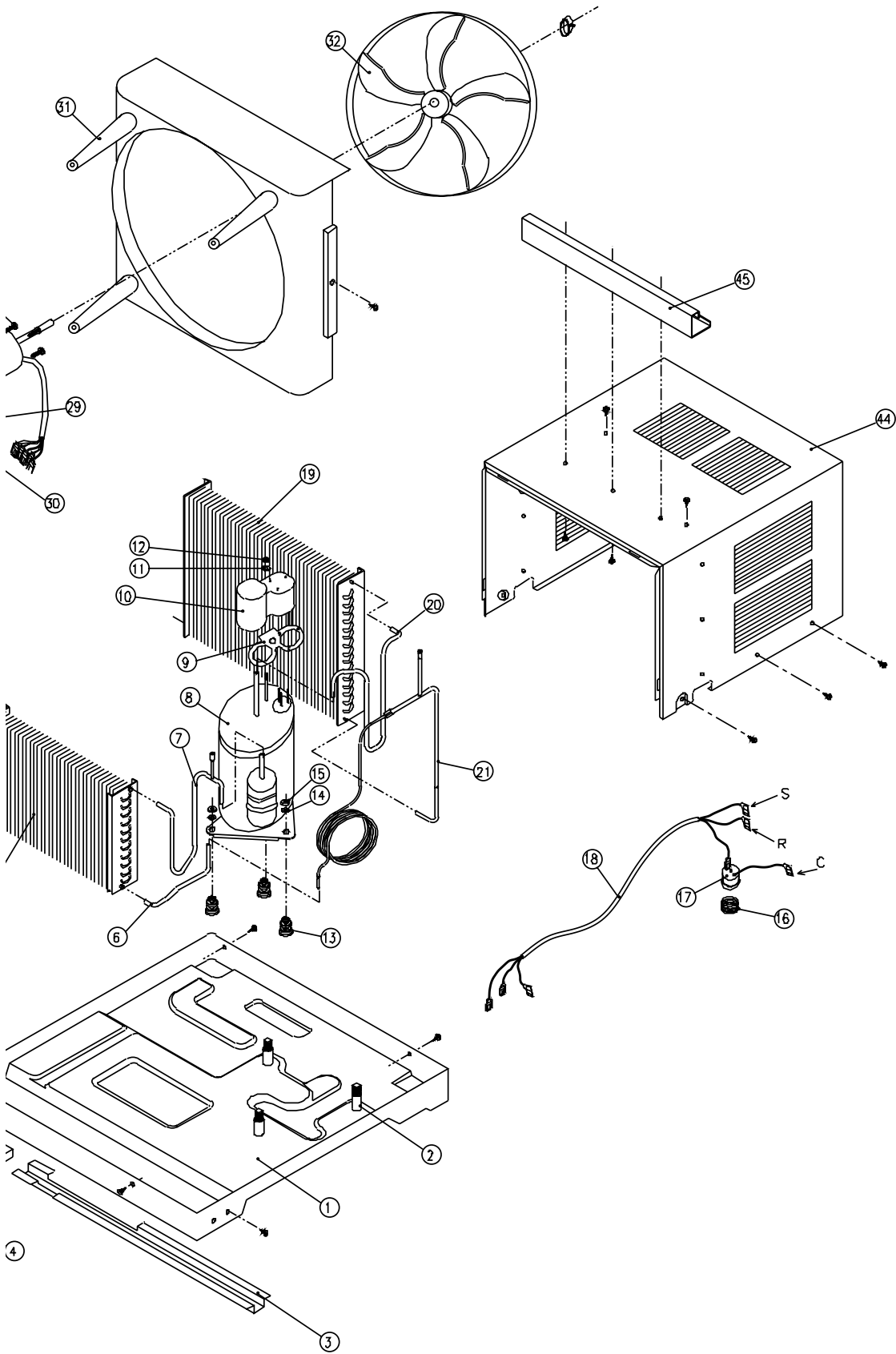
■ DWC-052C,DWB-052C PARTS LIST

✓ **Caution:** In this Service Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service information Center(<http://svc.dwe.co.kr>)

NO	CODE	COMPONENTS	Q'TY	SPECIFICATION	REMARK
1	3110300100	PAN BASE	1	SGCC T1.0	
2	3116000100	COMP BOLT	3	M8	DWC-052C
	3116000400	COMP BOLT	3	M8	DWB-052C
3	3112500100	GUIDE WIN LOWER	1	SGCC T0.8	DWC-052C
4	3118100100	PAN DRAIN	1	EPS	
5	3110000200	AS EVA	1	2R1C, 330X209X25	
6	3114400300	PIPE EVA IN	1	C1220T-OL, OD7.0XT0.7	
7	3110001900	AS PIPE SUCTION	1	C1220T-OL, OD7.94XT0.7	DWC-052C
	3110005600	AS PIPE SUCTION	1	C1220T-OL, OD7.94XT0.7	DWB-052C
8	3117100100	AS COMPRESSER	1	RM5455GQ87	DWC-052C
	3117100800	AS COMPRESSER	1	KH091VFHC	DWB-052C
9	-	GASKET	1		
10	-	TERMINAL COVER	1		
11	-	GASKET NUT	1		
12	-	NUT FLANGE	1		
13	(AHT941C003)	GROMMET	3	EPDM	DWC-052C
	3116000300	GROMMET	3	EPDM	DWB-052C
14	-	WASHER	3		
15	-	NUT	3		
16	-	SPRING	1		
17	-	OVERLOAD PROTECTOR	1		
18	3112700300	HARNESS COMP	1	UL1015 3*16AWG	
19	3110000300	ASSY CONDENSER	1	2R1C, 380X304X25	
20	3114400100	PIPE DISCHARGE	1	C1220T-OL, OD6.35	DWC-052C
	3114401600	PIPE DISCHARGE	1	C1220T-OL, OD6.35	DWB-052C
21	3110002000	AS PIPE CAPILLARY	1	ID1.0, OD3.2X1000	
22	3101202800	CLIP FAN	2	SK5	
23	3111800100	FAN BLOWER	1	ABS730	
24	3116600100	SCROLL	1	EPS	
25	3114200100	PANEL HOUSING	1	SGCC T0.8	
26	7122401211	SCREW	3	T2S 4X12	
27	3118000100	MOTOR FAN	1	A9520KC030(DMI)	DWC-052C
	3118000400	MOTOR FAN	1	(S.W)	DWC-052C
	3118000500	MOTOR FAN	1	(O.S)	DWC-052C
	3118000800	MOTOR FAN	1	A9520CC020(DMI)	DWB-052C
28	7S432X2081	SCREW TAPTITE	4	TT3 TRS 3X8 MFZN	
29	3113800400	LOCK TWIST STANDOFF	1	DASTL-3NA	
30	3110700100	BUSHING	1	DACB-012(73MM)	
31	3111400100	COVER ORIFICE	1	PP(M540)	
32	3111800200	FAN PROPELLER	1	ABS+GF	
33	3114500300	PLATE SCROLL	1	EPS	
34	3113000100	HOLDER EVA	1	SGCC T0.6	
35	3110500100	BOX CONTROL	1	SGCC T0.6	
36	3111300100	CORD POWER	1	125V, 13A, SJT3*16AWG	DWC-052C
	3111300300	CORD POWER	1	250V, 16A	DWB-052C
37	3111200300	CLAMP POWER CORD	2	PP	
38	3116900100	CAPACITOR	1	4/40μF 370V	DWC-052C
	3116900200	CAPACITOR	1	4/40μF 370V	DWC-052C
	3116900800	CAPACITOR	1	2/13μF 400V	DWB-052C
39	3111200100	CLAMP CAPACITOR	1	SGCC T0.6	DWC-052C
	3101200600	CLAMP CAPACITOR	1	SGCC T1.0	DWB-052C
40	3118500100	THERMOSTAT	1	125/250VAC,20/80A,16~31°C	
	3118500200	THERMOSTAT	1	125/250VAC,20/80A,16~31°C	
41	3118500300	ROTARY S/W	1	SRB-315-4-10D	
42	3112700200	HARNESS ROTARY	1	UL1015 16AWG 105℃™	
43	3113500400	LABEL CIRCUIT	1	ART PAPER	
44	3110800100	CABINET	1	SGCC T0.6	
45	3112500200	GUIDE WINDOW TOP	1	SGCC T0.8	DWC-052C
46	3112400200	GRILLE FRONT	1	HIPS	
47	3116500100	BLADE VERTICAL	1	PP	
48	3111900200	FILTER	1	HIPS	
49	3110001400	AS KNOB	2	ABS720	
50	3111600100	DECO FRONT	1	PC FILM	
51	3118400100	SEAL G/FRONT(1)	1	F-PE	DWB-052C
52	3110012400	ASS'Y SEAL G/FRONT(2)	1	F-PE	DWB-052C
53	3110012500	ASS'Y SEAL G/FRONT(3)	1	F-PE	DWB-052C
54	3118400200	SEAL G/FRONT(4)	1	F-PE	DWB-052C

■ DWB-052C, DWC-052C EXPLODED DIAGRAM





S/M NO.: DWC052C020

DAEWOO ELECTRONICS CO., LTD.

686, AHYEON-DONG MAPO-GU SEOUL, KOREA

C.P.O. BOX 8003 SEOUL, KOREA

TELEX: DWELEC K28177-8

CABLE: "DAEWOOELEC"

FAX: 02) 590-6291

TEL: 02) 360-7114/590-6151~5

<http://www.dwe.daewoo.co.kr>

PRINTED DATE: JAN. 2001

DAEWOO

Service Manual

Window Type Room Air Conditioner

Model: DWB-052C

DWC-052C

✓ Caution

: In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center (<http://svc.dwe.co.kr>).



DAEWOO ELECTRONICS CO., LTD.