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1. PREFACE

This SERVICE MANUAL provides various service information, the mechanical and electrical parts, etc. This room air conditioner was manufactured and assembled under a strict quality control system.

The refrigerant is charged at the factory. Be sure to read the safety precautions prior to servicing the unit.

1.1 SAFETY PRECAUTIONS

1. When servicing the unit, set the ROTARY SWITCH or POWER SWITCH to OFF and unplug the power cord.
2. Observe the original lead dress.
If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing the unit, make an insulation resistance test to protect the customer from being exposed to shock hazards.

1.2 INSULATION RESISTANCE TEST

1. Unplug the power cord and connect a jumper between 2 pins (black and white).
2. The grounding conductor (green or green & yellow) should be open.
3. Measure the resistance value with an ohm meter between the jumpered lead and each exposed metallic part on the equipment at all the positions (except OFF or O) of the ROTARY SWITCH.
4. The value should be over 1M Ω .

1.3 SPECIFICATIONS

1.3.1 FOR LW-B0811CL, LW-B0810CL, LW-B0712CL

MODELS		LW-B0811CL	LW-B0810CL	LW-B0712CL
ITEMS				
POWER SUPPLY		1φ, 115V, 60Hz		
COOLING CAPACITY	(Btu/h)	8,000	8,000	7,000
INPUT	(W)	800	885	760
RUNNING CURRENT	(A)	7.0	7.8	7.0
E.E.R	(Btu/W.h)	10.0	9.0	9.2
OPERATING TEMPERATURE	INDOOR (°C)	26.7 (DB) ^{fT} 19.4 (WB) ^{fTT}		
	OUTDOOR (°C)	35 (DB) 23.9 (WB)		
REFRIGERANT (R-22) CHARGE		415g (14.6Oz)		320g (11.3Oz)
EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE		
CONDENSOR		2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE		
FAN, INDOOR		BLOWER		
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING		
FAN SPEEDS, FAN/COOLING		2/2		
FAN MOTOR		6 POLES		
OPERATION CONTROL		ROTARY SWITCH		
ROOM TEMP. CONTROL		THERMOSTAT		
AIR DIRECTION CONTROL		HORIZONTAL LOUVER (RIGHT & LEFT)		
		VANE (UP & DOWN)		
CONSTRUCTION		SLIDE IN-OUT CHASSIS		
PROTECTOR	COMPRESSOR	OVERLOAD PROTECTOR		
	FAN MOTOR	INTERNAL THERMAL PROTECTOR		
POWER CORD		1.8m (7') (3 WIRE WITH GROUDING)		
		ATTACHMENT PLUG (CORD-CONNECTED TYPE)		
DRAIN SYSTEM		SPLASHED BY FAN SLINGER		
NET WEIGHT	(lbs/kg)	71/32		
OUTSIDE DIMENSION (W i H i D)	(inch)	20 ¹ / ₁₆ " i 13 ⁷ / ₈ " i 19 ³ / ₁₆ "		
	(mm)	510 i 353 i 487		

^{fT} DB : dry bulb

^{fTT} WB : wet bulb

1.3.2 FOR LW-B0760CL, LW-B0960CL

ITEMS \ MODELS		LW-B0820CL	LW-B0760CL	LW-B0960CL
POWER SUPPLY		1ϕ~, 220V~, 60Hz	1ϕ~, 220-240V~, 50Hz	
COOLING CAPACITY	(Btu/h)	8,000	7,000	9,000
INPUT	(W)	720	775	1,000
RUNNING CURRENT	(A)	3.4	3.4	4.4
E.E.R	(Btu/W.h)	11.0	9.0	9.0
OPERATING TEMPERATURE	INDOOR (°C)	27 (DB) 19 (WB)		
	OUTDOOR (°C)	35 (DB) 24 (WB)		
REFRIGERANT (R-22) CHARGE		380g(13.4Oz)	325g (11.5Oz)	445g (15.7Oz)
EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE		
CONDENSOR		2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE		
FAN, INDOOR		BLOWER		
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING		
FAN SPEEDS, FAN/COOLING		2/2		
FAN MOTOR		6 POLES		
OPERATION CONTROL		ROTARY SWITCH		
ROOM TEMP. CONTROL		THERMOSTAT		
AIR DIRECTION CONTROL		HORIZONTAL LOUVER (RIGHT & LEFT)		
		VANE (UP & DOWN)		
CONSTRUCTION		SLIDE IN-OUT CHASSIS		
PROTECTOR	COMPRESSOR	OVERLOAD PROTECTOR		
	FAN MOTOR	INTERNAL THERMAL PROTECTOR		
POWER CORD		1.8m (7') (3 WIRE WITH GROUDING)		
		ATTACHMENT PLUG (CORD-CONNECTED TYPE)		
DRAIN SYSTEM		SPLASHED BY FAN SLINGER		
NET WEIGHT		(lbs/kg) 71/32		
OUTSIDE DIMENSION (W i¿ H i¿ D)	(inch)	20 ¹ / ₁₆ " i¿ 13 ⁷ / ₈ " i¿ 19 ³ / ₁₆ "		
	(mm)	510 i¿ 353 i¿ 487		

1.3.3 FOR LW-B0713CL, LW-B0961CL

ITEMS \ MODELS		LW-B0713CL	LW-B0961CL
POWER SUPPLY		1ϕ~, 110V, 60Hz	1ϕ~, 220-240V~, 50Hz
COOLING CAPACITY	(Btu/h)	7,142	9,000
INPUT	(W)	790	1,000
RUNNING CURRENT	(A)	7.2	4.4
E.E.R	(Btu/W.h)	9.0	9.0
OPERATING TEMPERATURE	INDOOR (°C)	27 (DB) 19.5 (WB)	27 (DB) 19 (WB)
	OUTDOOR (°C)	35 (DB) 24 (WB)	35 (DB) 24 (WB)
REFRIGERANT (R-22) CHARGE		320g (11.3Oz)	445g (15.7Oz)
EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE	
CONDENSOR		2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE	
FAN, INDOOR		BLOWER	
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING	
FAN SPEEDS, FAN/COOLING		2/2	
FAN MOTOR		6 POLES	
OPERATION CONTROL ROOM TEMP. CONTROL		REMOTE CONTROL	
		THERMISTOR	
AIR DIRECTION CONTROL		HORIZONTAL LOUVER (RIGHT & LEFT)	
		VANE (UP & DOWN)	
CONSTRUCTION		SLIDE IN-OUT CHASSIS	
PROTECTOR	COMPRESSOR	OVERLOAD PROTECTOR	
	FAN MOTOR	INTERNAL THERMAL PROTECTOR	
POWER CORD		1.8m (7') (3 WIRE WITH GROUding)	
		ATTACHMENT PLUG (CORD-CONNECTED TYPE)	
DRAIN SYSTEM		SPLASHED BY FAN SLINGER	
NET WEIGHT	(lbs/kg)	71/32	
OUTSIDE DIMENSION (W × H × D)	(inch)	20 ¹ / ₁₆ " × 13 ⁷ / ₈ " × 19 ³ / ₁₆ "	
	(mm)	510 × 353 × 487	

1.4 FEATURES

- Designed for COOLING ONLY.
- Power and whisper cooling.
- Slide-in and slide-out chassis for simple installation and service.
- Side air-intake, side cooled-air discharge.
- Built-in adjustable THERMOSTAT.
- Washable one-touch filter.
- Compact size.
- Reliable and efficient rotary compressor is equipped.

1.5 CONTROL LOCATIONS

1.5.1 COOLING ONLY MODEL

• VENTILATION

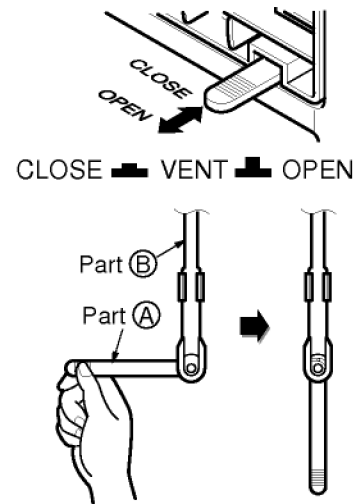
The ventilation lever must be in the CLOSE position in order to maintain the best cooling conditions.

When fresh air is necessary in the room, set the ventilation lever to the OPEN position.

The damper is opened and room air is exhausted.

NOTE

Before using the ventilation feature, make a ventilation kit. First pull down part ① to horizontal line with part ②.



• ENERGY SAVER

Energy saver provides more energy efficient operation of the air conditioner by cycling the fan on and off with compressor.

REGULAR : Energy saver is not operated.

ECONOMY : Energy saver is operated.

(FOR LW-B0811CL)

• THERMOSTAT

Thermostat will automatically control the temperature of the room. Select a higher number for a cooler temperature in the room. The temperature is selected by positioning the knob to the desired position.

The 5 or 6 position is a normal setting for average conditions.

• OPERATION

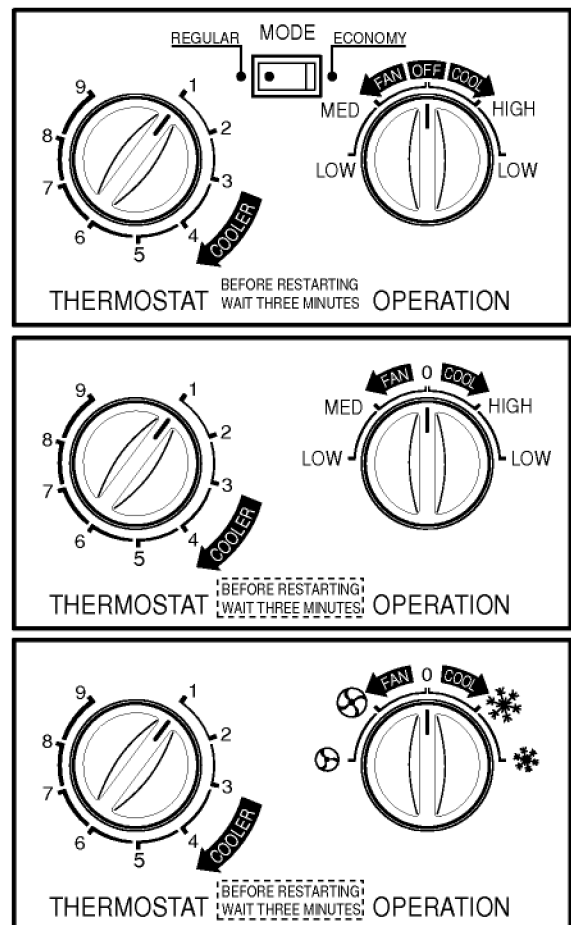
OFF (0) : Turns the air conditioner off.

HIGH FAN (⑧) : High fan speed operation without cooling.

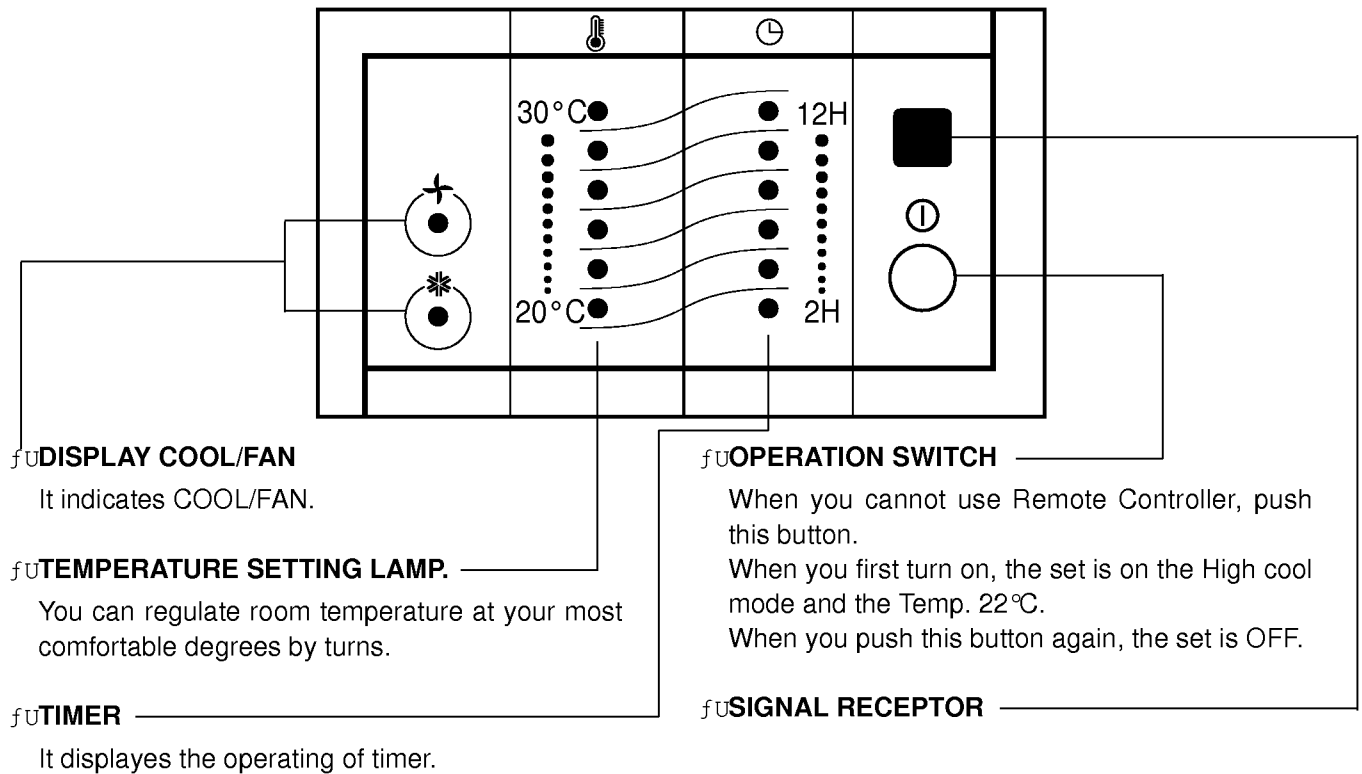
LOW FAN (⑤) : Low fan speed operation without cooling.

HIGH COOL (❄️) : Cooling with the high fan speed operation.

LOW COOL (❄️) : Cooling with the low fan speed operation.

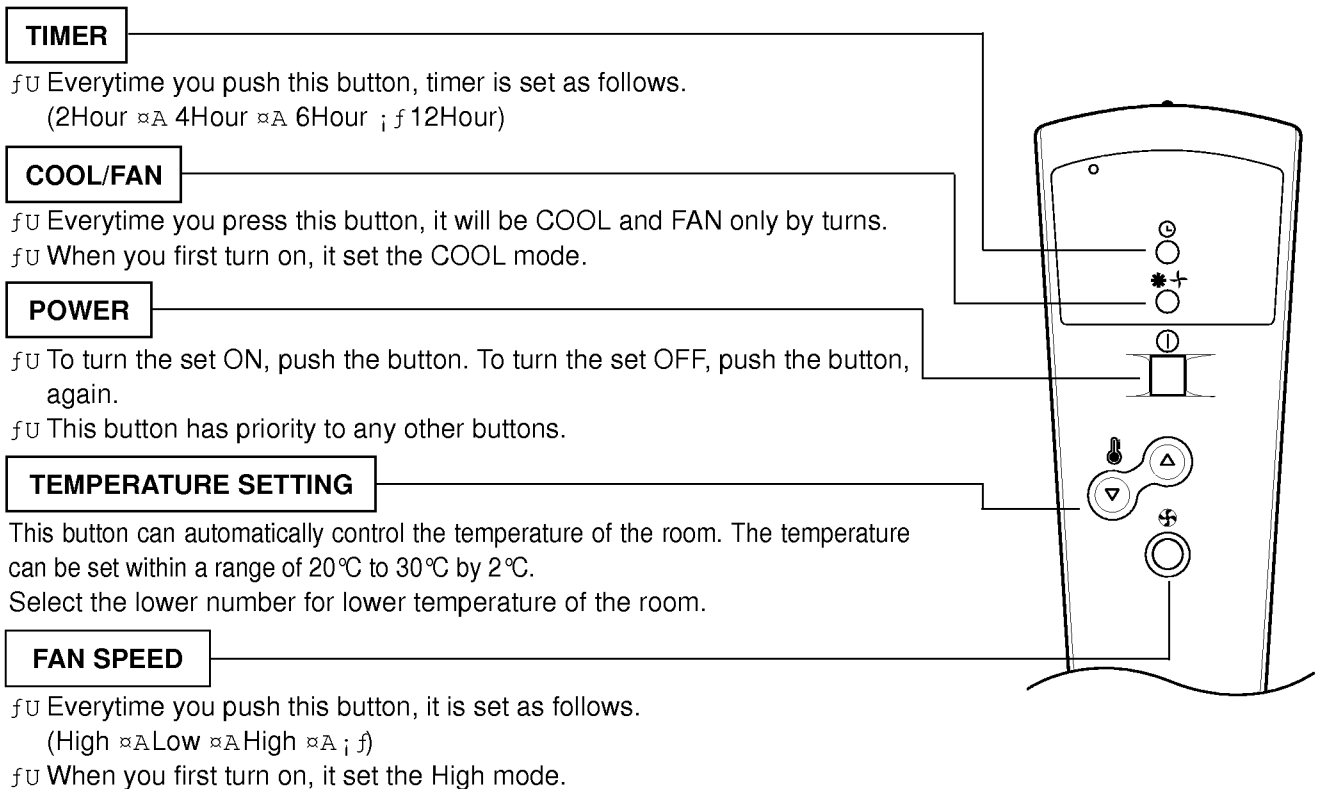


1.5.2 COOLING ONLY MODEL WITH REMOTE CONTROL



fU REMOTE CONTROL

Precaution: The Remote Control unit will not function properly if strong light strikes the sensor window of the air conditioner or if there are obstacles between the Remote Control unit and the air conditioner.



2. DISASSEMBLY INSTRUCTIONS

- Before disassembling, turn the POWER SWITCH to OFF and disconnect the power cord.

2.1 MECHANICAL PARTS

2.1.1 FRONT GRILLE

1. Open the INLET GRILLE upward and remove the air filter.
2. Remove the screw which fastens the FRONT GRILLE.
3. Pull the FRONT GRILLE from the right side.
4. Remove the FRONT GRILLE.
5. Re-install the components by referring to the above removal procedure. (See figure 1)

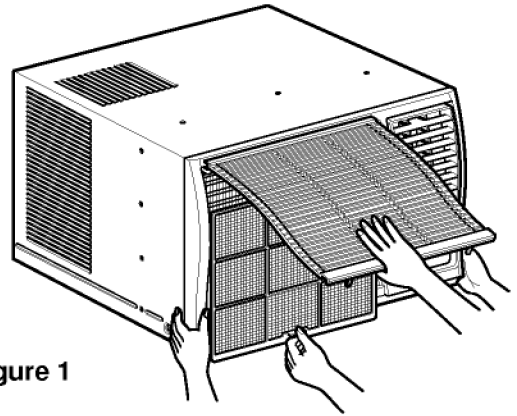


Figure 1

2.1.2 CABINET

1. After disassembling the FRONT GRILLE, remove the two screws which fasten the CABINET at both sides.
2. Remove the two screws which fasten the CABINET at back.
3. Pull the BASE PAN forward. (See figure 2)

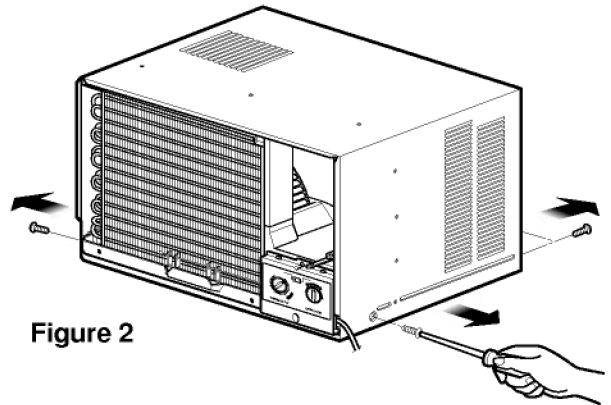


Figure 2

2.1.3 CONTROL BOX

1. Remove the front grille. (Refer to section 2.1.1)
2. Remove the 3 screws which fasten the CONTROL BOX.
3. Pull the CONTROL BOX forward about 10-15cm (1/2").
4. Discharge the CAPACITOR by placing a 20,000 ohm resistor across the capacitor terminals.
5. Remove two wire housings in the control box.
6. Pull the control box forward completely.
7. Re-install the components by referring to the above removal procedure. (See figure 3)
(Refer to the CIRCUIT DIAGRAM found on pages 26~31 in this manual and on the control box.)

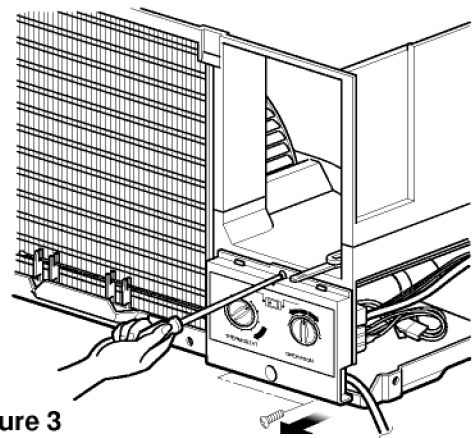


Figure 3

2.2 AIR HANDLING PARTS

2.2.1 AIR GUIDE

1. Remove the front grille. (Refer to section 2.1.1)
2. Remove the cabinet. (Refer to section 2.1.2)
3. Pull the cover E.P.S upward.
4. Remove 3 screws which fasten the UPPER AIR GUIDE.
5. Push the two hooks which fasten the UPPER AIR GUIDE and remove the UPPER AIR GUIDE.
6. Re-install the components by referring to the above removal procedure. (See figure 4 and 5)

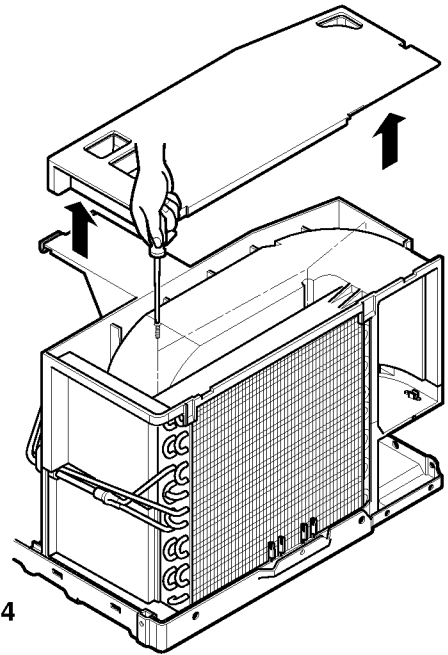


Figure 4

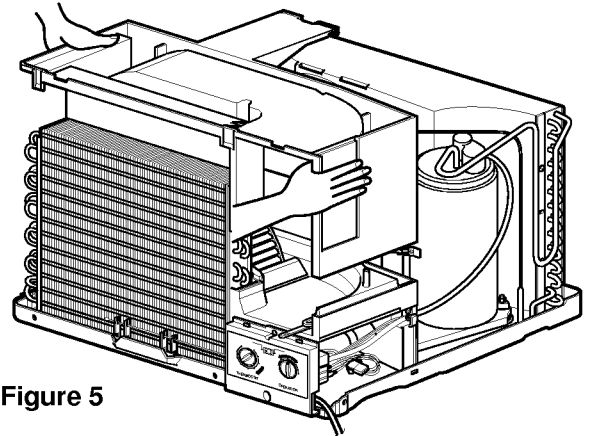


Figure 5

2.2.2 BLOWER

1. Remove the upper air guide. (Refer to section 2.2.1)
2. Move the evaporator sideways carefully.
3. Remove the clamp which secures the blower with a hand plier. (See figure 6)
4. Remove 2 screws which fasten the MOTOR MOUNT.
5. Pull the BLOWER forward by dragging the motor mount upward carefully.
6. Remove the BLOWER.
7. Re-install the components by referring to the above removal procedure. (See figure 7)

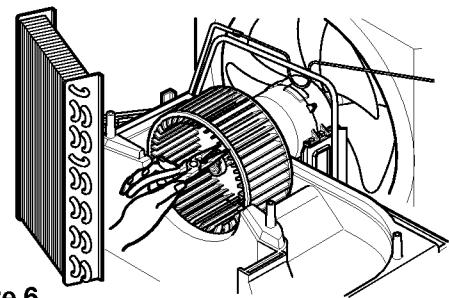


Figure 6

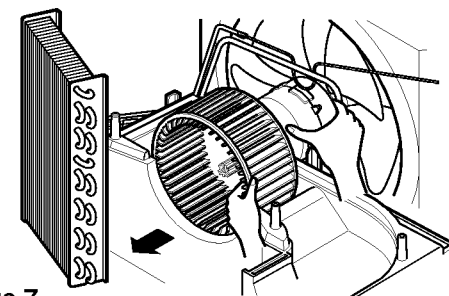


Figure 7

2.2.3 FAN, SHROUD

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the 4 screws which fasten the condenser.
3. Move the condenser sideward carefully.
4. Remove the clamp which secures the FAN with a hand plier.
5. Remove the FAN.
6. Remove the SHROUD.
7. Re-install by referring to the above removal procedure.
(See figure 8 and 9)

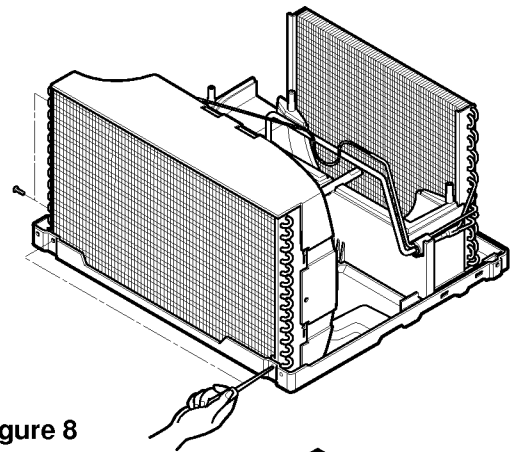


Figure 8

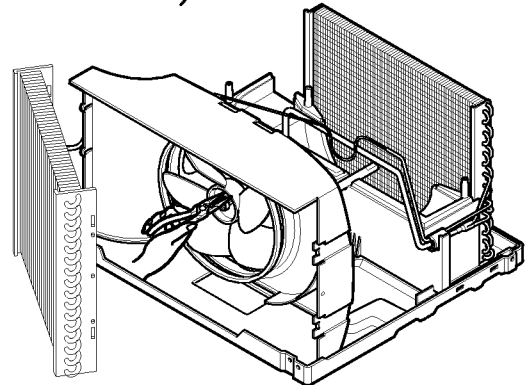


Figure 9

2.3 ELECTRICAL PARTS

2.3.1 OVERLOAD PROTECTOR

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the nut which fastens the TERMINAL COVER.
3. Remove the terminal cover.
4. Remove all the leads from the OVERLOAD PROTECTOR.
5. Remove the overload protector.
6. Re-install the components by referring to the above removal procedure.
(See figures 10 and 11)

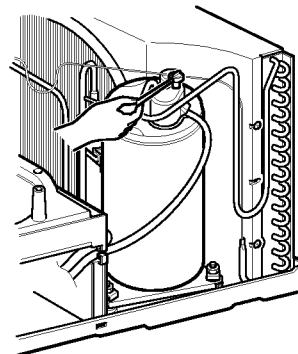


Figure 10

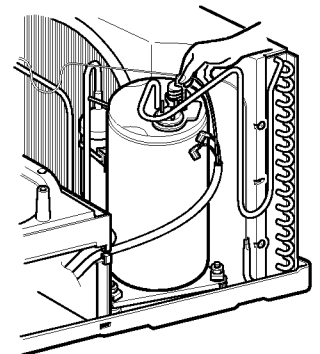


Figure 11

2.3.2 COMPRESSOR

1. Remove the cabinet. (Refer to section 2.1.2)
2. Discharge the refrigerant system using a Freon™ Recovery System.
If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system.
3. Remove the overload protector. (Refer to section 2.3.1)
4. After purging the unit completely, detach the suction tube and the discharge tubes at the compressor connections.
5. Remove the 3 nuts and the 3 bracket washers which fasten the compressor.
6. Remove the compressor.
7. Re-install the components by referring to the above removal procedure. (See figure 12)

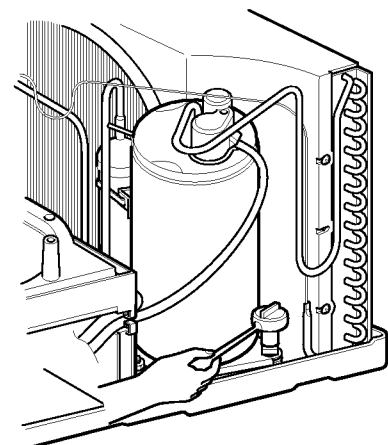


Figure 12

2.3.3 CAPACITOR

1. Remove the control box. (Refer to section 2.1.3)
2. Remove the screw and the clamp which fasten the CAPACITOR.
3. Disconnect all the leads of the capacitor terminals.
4. Re-install the components by referring to the above removal procedure. (See figure 13)

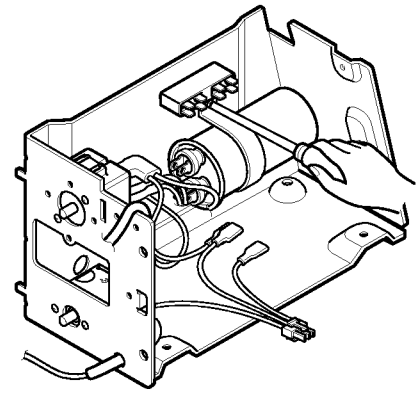


Figure 13

2.3.4 POWER CORD

1. Remove the control box. (Refer to section 2.1.3)
2. Disconnect the grounding screw from the control box. (See figure 14)
3. Disconnect the 2 receptacles.
4. Remove the screw which fastens the CLIP CORD.
5. Pull the power cord. (See figure 15)
6. Re-install the components by referring to the above removal procedure.
(Use only one ground-marked hole ⊕ for ground connection.)

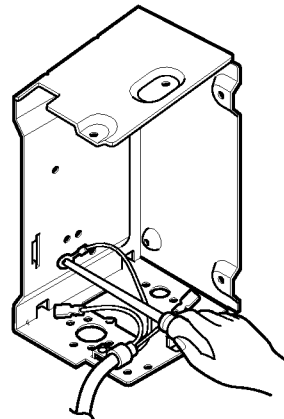


Figure 14

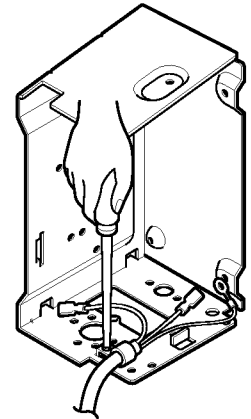


Figure 15

2.3.5 THERMOSTAT

1. Remove the control box. (Refer to section 2.1.3)
2. Remove the screw which fastens the display panel.
3. Remove the two knobs.
4. Remove the display panel.
5. Remove the 2 screws which fasten the thermostat.
6. Disconnect all the leads of thermostat terminals.
7. Remove the THERMOSTAT.
8. Re-install the components by referring to the above removal procedure. (See figure 16)

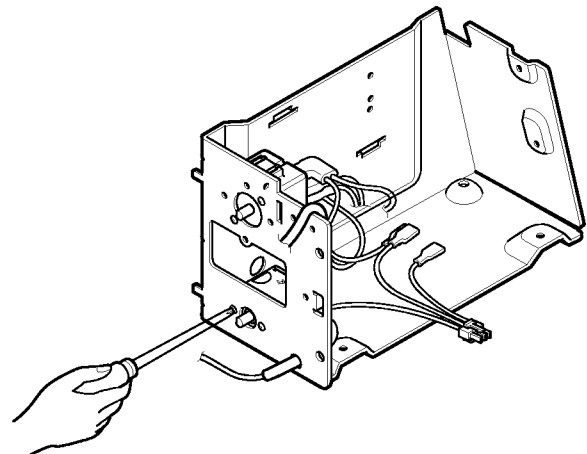


Figure 16

2.3.6 ROTARY SWITCH

1. Remove the control box. (Refer to section 2.1.3)
2. Remove the screw which fastens the display panel.
3. Remove the two knobs.
4. Remove the display panel.
5. Remove the 2 screws which fasten the rotary switch.
6. Disconnect all the leads of the rotary switch terminals.
7. Remove the rotary switch.
8. Re-install the components by referring to the above removal procedure. (See figure 17)

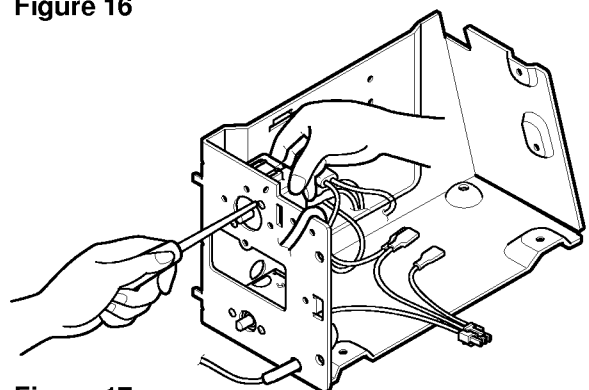


Figure 17

2.3.7 MOTOR

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the upper air guide. (Refer to section 2.2.1)
3. Remove the blower. (Refer to section 2.2.2)
4. Remove the fan. (Refer to section 2.2.3)
5. Remove the shroud. (Refer to section 2.2.3)
6. Remove the control box. (Refer to section 2.1.3)
7. Remove the 2 screws which fasten the motor.
8. Remove the motor.
9. Re-install the components by referring to the above removal procedure. (See figure 18)

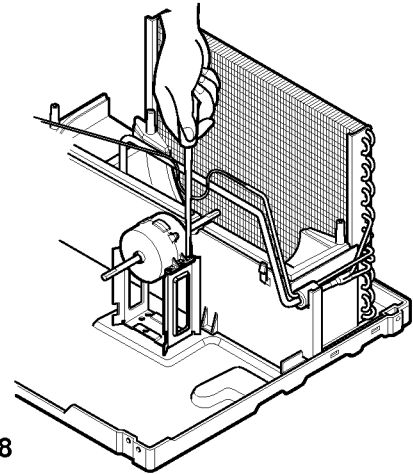


Figure 18

2.4 REFRIGERATING CYCLE

2.4.1 CONDENSER

1. Remove the cabinet. (Refer to section 2.1.2)
2. Discharge the refrigerant system using a Freon™ Recovery System.
If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system.
3. Remove the 4 screws which fasten the condenser.
4. After discharging the refrigerant completely, detach the interconnecting tube at the condenser connections.
5. Remove the condenser.
6. Re-install the components by referring to notes.
(See figure 19)

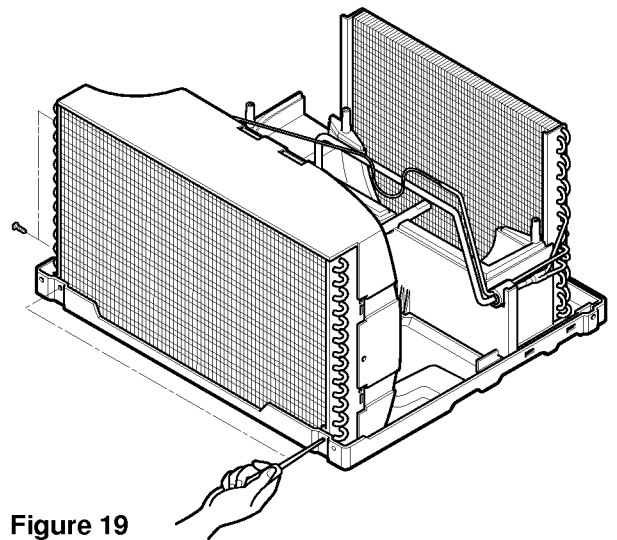


Figure 19

2.4.2 EVAPORATOR

1. Remove the cabinet. (Refer to section 2.1.2)
2. Discharge the refrigerant system using a Freon™ Recovery System.
If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system.
3. Remove the cover E.P.S and the upper air guide. (Refer to section 2.2.1)
4. After discharging the refrigerant completely, detach the interconnecting tube at the evaporator connections.
5. Remove the evaporator.
6. Re-install the components by referring to notes.
(See figure 20)

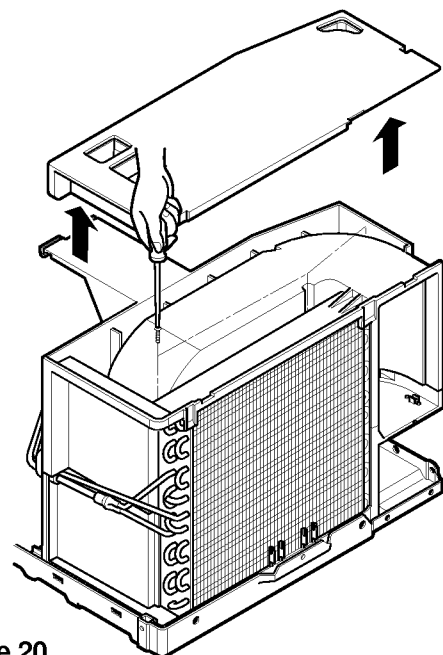


Figure 20

2.4.3 CAPILLARY TUBE

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the upper air guide. (Refer to section 2.2.1)
3. Discharge the refrigerant system using a Freon™ Recovery System.

If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system.

4. After discharging the refrigerant completely, detach the interconnecting tube at the CAPILLARY TUBE.
5. Remove the CAPILLARY TUBE.
6. Re-install the component by referring to notes.

NOTES

– Replacement of the refrigerating cycle.

1. When replacing the refrigerating cycle, discharge the refrigerant system using a Freon™ Recovery System.
If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system.
2. After discharging the unit completely, remove the desired component, and detach the pinch-off tubes.
3. Solder service valves into the pinch-off tube ports, leaving the valves open.
4. Solder the pinch-off tubes with care.
5. Evacuate as follows:
 - 1) Connect the vacuum pump, as illustrated Figure 21A.
 - 2) Start the vacuum pump, slowly open manifold valves A and B with the two full turns counter-clockwise and leave the valves open.
The vacuum pump is now pulling through valves A and B up to valve C by means of the manifold and entire system.

CAUTION

If high vacuum equipment is used, just crack valves A and B for a few minutes, then open slowly with the two full turns counter-clockwise. This will keep oil from foaming and being drawn into the vacuum pump.

- 3) Operate the vacuum pump for 20 to 30 minutes, until 600 microns of vacuum is obtained. Close valves A and B and observe vacuum gauge for a few minutes. A rise in pressure would indicate a possible leak or moisture remaining in the system. With valves A and B closed, stop the vacuum pump.

- 4) Remove the hose from the vacuum pump and place it on the charging cylinder. See figures 21A and 21B. Open valve C.
Discharge the line at the manifold connection.
- 5) The system is now ready for final charging.
6. Recharge as follows :
 - 1) Refrigerating cycle systems are charged from the High-side. If the total charge cannot be put in the High-side, the balance will be put in the suction line through the access valve which you installed as the system was opened.
 - 2) Connect the charging cylinder as shown in figure 21B.
With valve C open, discharge the hose at the manifold connection.
 - 3) Open valve A and allow proper charge to enter the system. Valve B is still closed.
 - 4) If more charge is required, the high-side does not take it. Close valve A.
 - 5) With the unit running, open valve B and add the balance of the charge.
 - a. Do not add the liquid refrigerant to the Low-side.
 - b. Watch the Low-side gauge; allow pressure to rise to 30 lbs.
 - c. Turn off valve B and allow pressure to drop.
 - d. Repeat steps b and c until the balance of the charge is in the system.
 - 6) When the satisfied unit is operating correctly, use the pinch-off tool with the unit still running and the clamp on to the pinch-off tube. Using a tube cutter, cut the pinch-off tube about 2 inches from the pinch-off tool. Use sil-fos solder and solder pinch-off tube closed. Turn off the unit, allow it to set for a while, and then test the leakage of the pinch-off connection.

Equipment needed: Vacuum pump, Freon™ Recovery System, Charging cylinder, Manifold gauge, Brazing equipment. Pinch-off tool capable of making a vapor-proof seal, Leak detector, Tubing cutter, Hand Tools to remove components, Service valve.

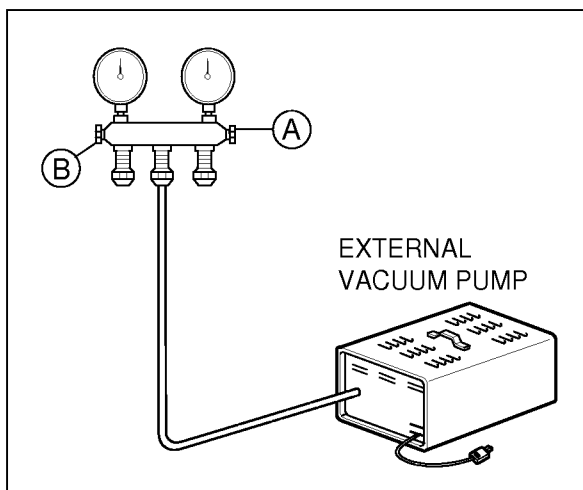
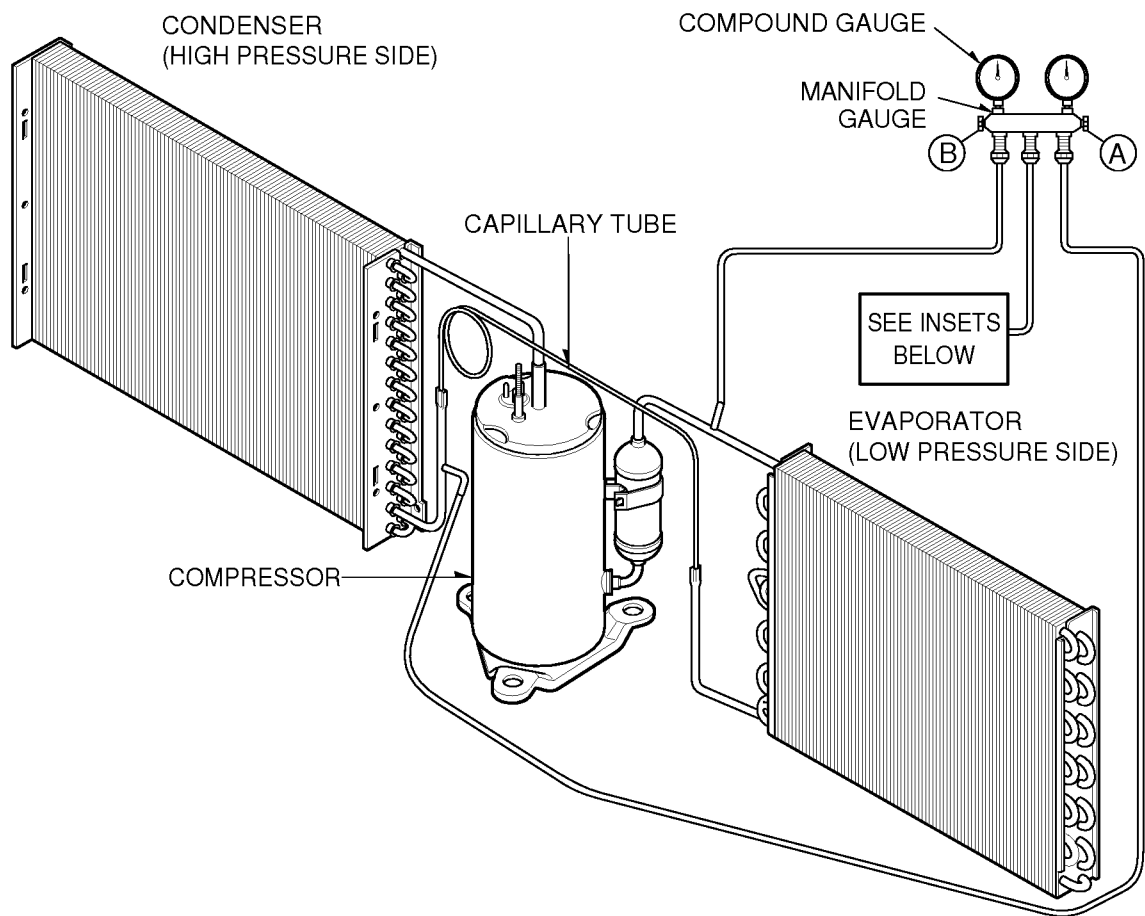


Figure 21A-Pulling Vacuum

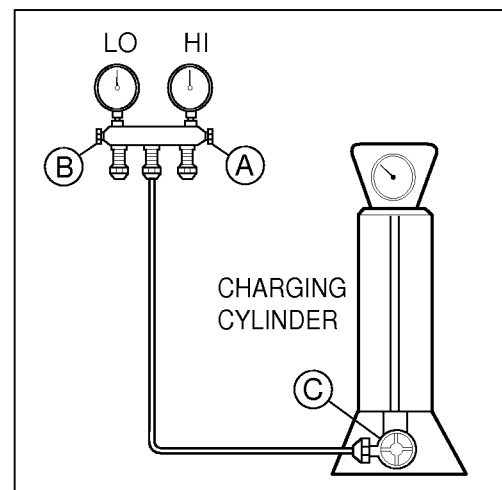


Figure 21B-Charging

3. INSTALLATION

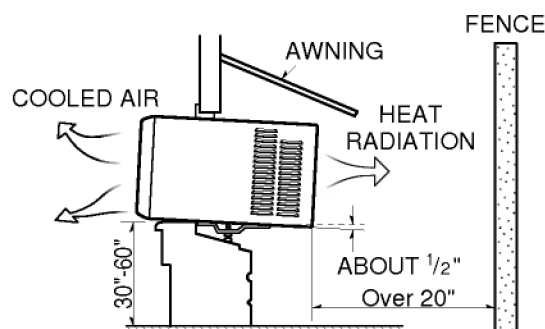
3.1 SELECT THE BEST LOCATION

1. To prevent vibration and noise, make sure the unit is installed securely and firmly.
2. Install the unit where the sunlight does not shine directly on the unit.
3. The outside of the cabinet must extend outward for at least 10" and there should be no obstacles, such as a fence or wall, within 20" from the back of the cabinet because it will prevent heat radiation of the condenser. Restriction of outside air will greatly reduce the cooling efficiency of the air conditioner.

CAUTION

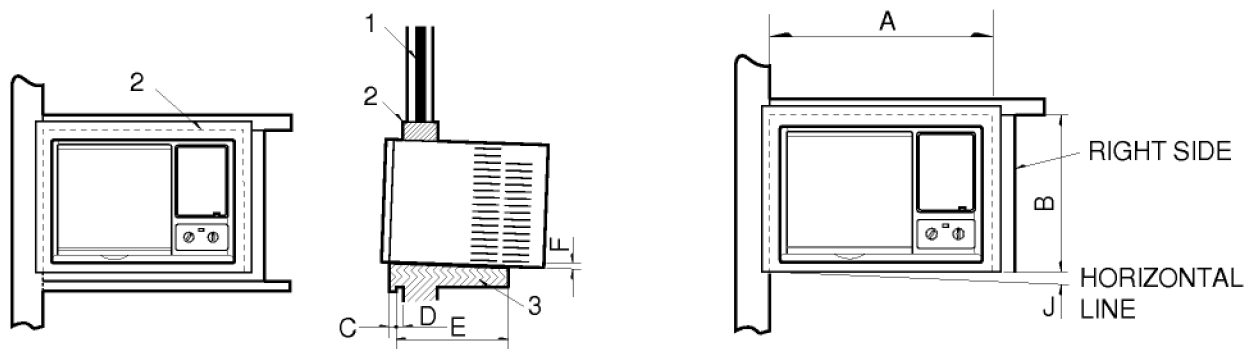
All side louvers of the cabinet must remain exposed to the outside of the structure.

4. Install the unit slightly slanted so the back is slightly lower than the front (about $\frac{1}{2}$ "). This will force condensed water to the outside.
5. Install the unit with the bottom about 30"~60" above the floor level.



3.2 HOW TO INSTALL

3.2.1 WHEN USING GASKET



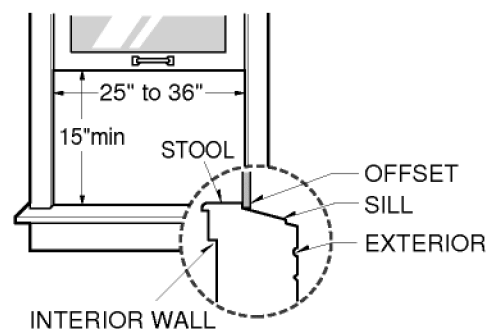
1. WINDOW (WIDTH-A, HEIGHT-B)
2. GASKET
3. WALL

A	B	C	D	E	F	G
535mm (21 $\frac{1}{16}$ ")	365mm (14 $\frac{3}{8}$ ")	30mm (1 $\frac{1}{16}$ ")	0~25mm (0~1")	OVER 340mm (13 $\frac{7}{16}$ ")	12~15mm ($\frac{15}{32}$ "~ $\frac{19}{32}$ ")	-5~5mm (- $\frac{3}{16}$ "~ $\frac{3}{16}$ ")

3.2.2 WHEN USING INSTALLATION KITS.

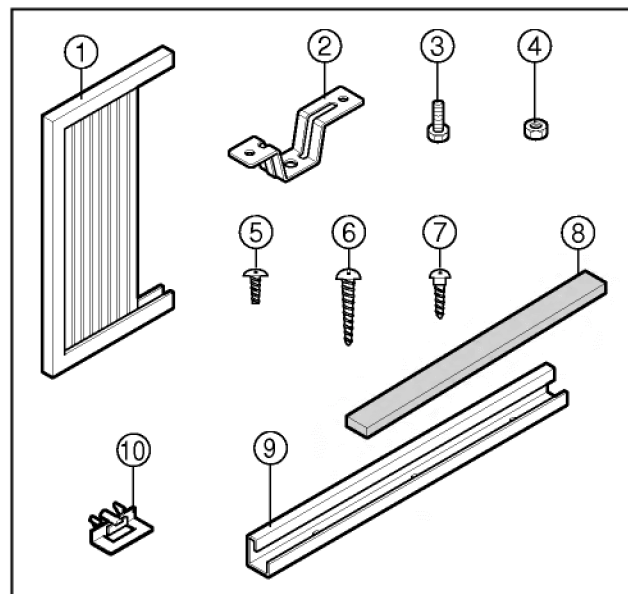
A. WINDOW REQUIREMENTS

1. This unit is designed for installation in standard double hung windows with actual opening widths from 25" to 36". The top and bottom window sash must open sufficiently to allow a clear vertical opening of 15" from the bottom of the upper sash to the window stool.
2. The stool offset (height between the stool and sill) must be less than 1 $\frac{1}{4}$ ".



B. INSTALLATION KITS CONTENTS

NO.	NAME OF PARTS	Q'TY
1	GUIDE PANEL	2
2	SILL SUPPORT	2
3	BOLT	2
4	NUT	2
5	SCREW (TYPE A)	16
6	SCREW (TYPE B)	3
7	SCREW (TYPE C)	4
8	FOAM-STRIP	1
9	UPPER GUIDE	1
10	FRAME GUIDE	2

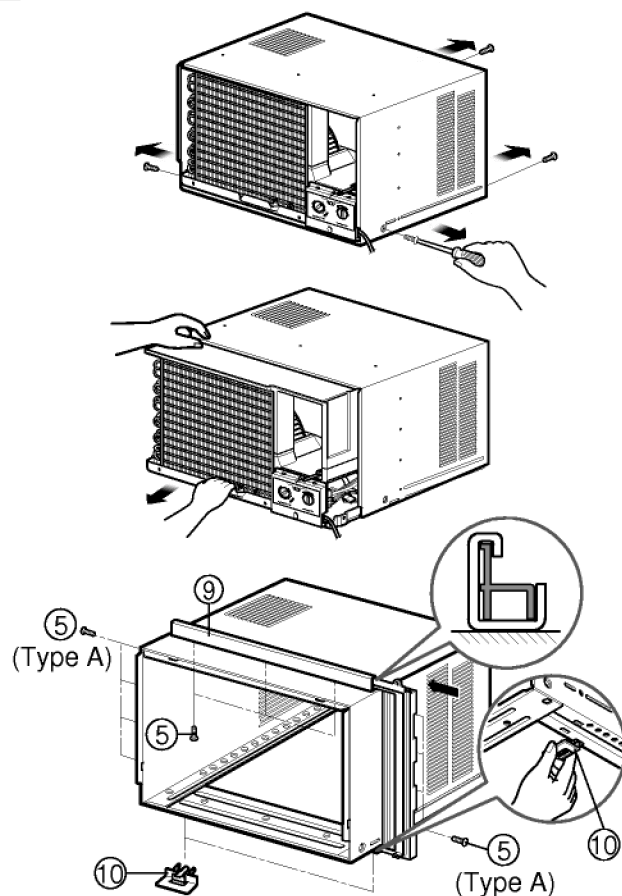


C. SUGGESTED TOOL REQUIREMENTS

SCREWDRIVER (+), RULER, KNIFE, HAMMER, PENCIL, LEVEL

D. PREPARATION OF CHASSIS

1. Remove the front grille.
2. Remove the screw which fastens the cabinet at both sides and at the back.
3. Slide the unit out of the cabinet by gripping the base pan handle and pull forward while bracing the cabinet.
4. Screw the upper guide 9 to the upper of the cabinet respectively. (Type A screw 5 : Length, eight millimeters (5/16") and below.)
5. Insert the frame guide 10 into the bottom of the cabinet.
6. Insert the guide panels 1 into the upper guide 9 and frame guides 10 of the air conditioner.
7. Fasten the curtains to the unit with screws. (Type A)

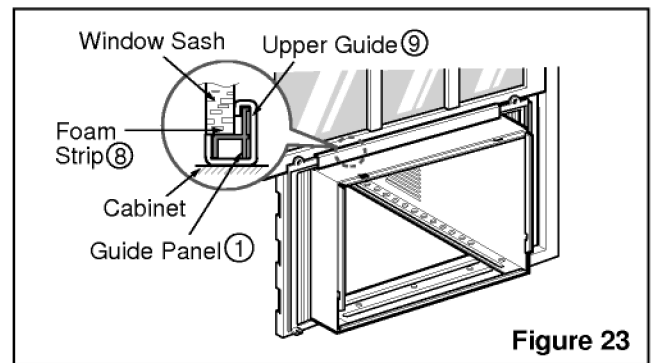
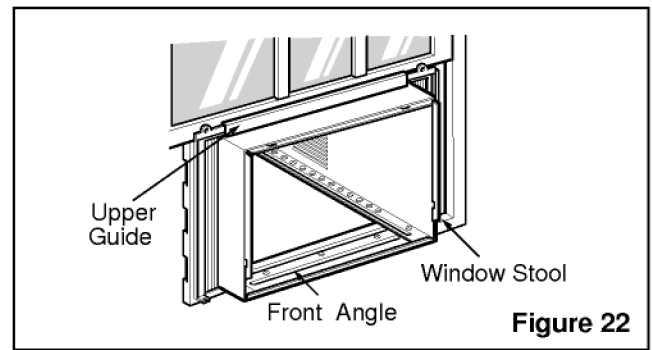


E. CABINET INSTALLATION

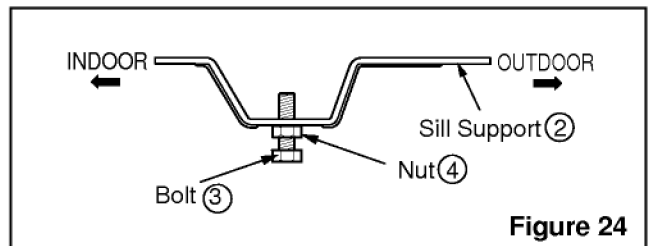
1. Open the window. Mark a line at the center of the window stool (or desired air conditioner location). Carefully place the cabinet on the window stool and align the center mark on the bottom front with the center line marked in the window stool.
2. Pull the bottom window sash down behind the upper guide until it meets.

NOTES

- Do not pull the window sash down so tight that the movement of the guide panel is restricted.



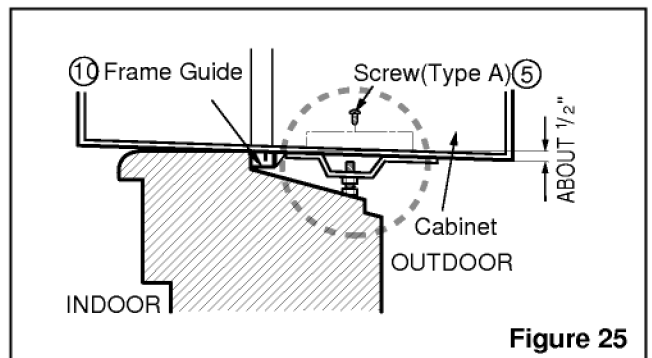
3. Loosely assemble the sill support. (See figure 24)



4. Select the position that will place the sill support near the outermost point on sill (See figure 25).

NOTE: Be careful when you install the cabinet (frame guides \propto are broken very easily).

5. Attach the sill support to the cabinet track hole in relation to the selected position using the screws (Type A) (See figure. 25).



6. Place the sill support with the cabinet on the window sill's selected position.

7. The cabinet should be installed with a very **slight tilt (about 1/2") downward** toward the outside (See Fig. 26).

Adjust the bolt and the nut of the sill support for balancing the cabinet.

8. Attach the cabinet to the window stool by driving the screws ✕ (Type B: Length sixteen millimeters (5/8") and below.) through the front angle into window stool.

9. Pull each guide panel fully to each sash track, and repeat step2.

10. Attach each guide panel to the window sash using screws ✕ (Type C).
(See Fig. 27)

11. Slide the chassis into the cabinet.
(See figure 28)

CAUTION

For security purposes, reinstall screws at cabinet's sides.

12. Cut the foam-strip to the proper length and insert between the upper window sash and the lower window sash.
(See figure 29)

13. After installing the unit back into the cabinet, there will be an air gap between the bottom of the unit and the window sill. Use the foam-strip ✕ provided to fill in the opening.

14. Assemble the front grille with the cabinet.
(See figure 30)

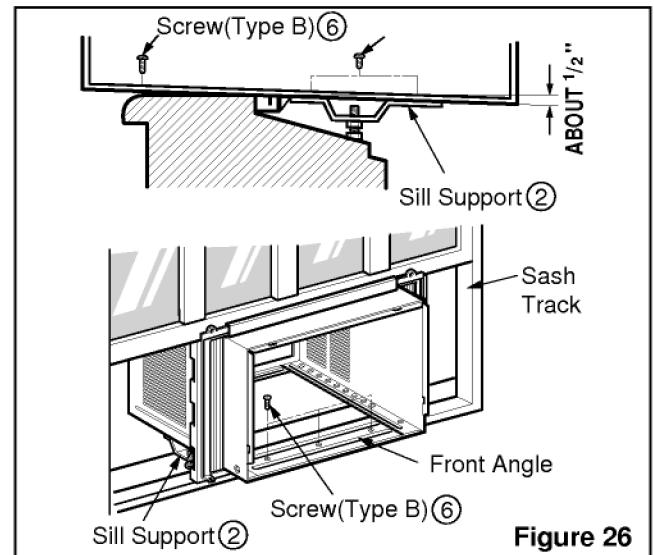


Figure 26

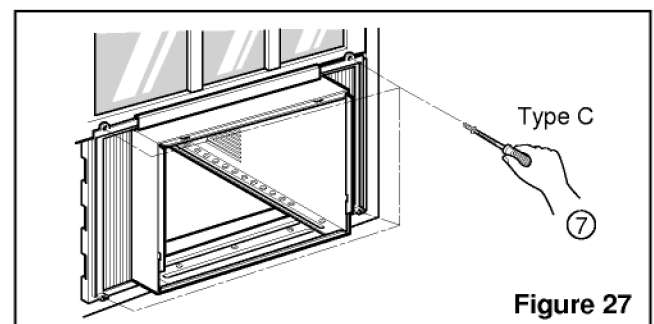


Figure 27

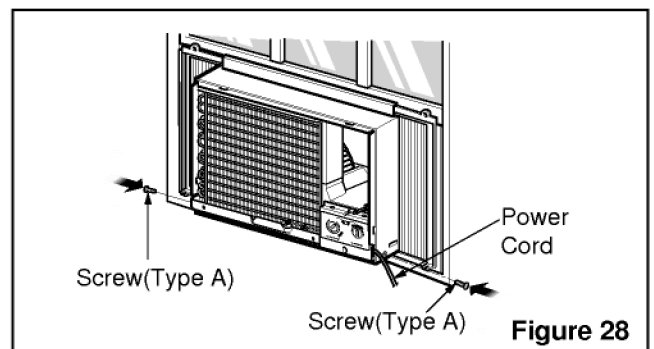


Figure 28

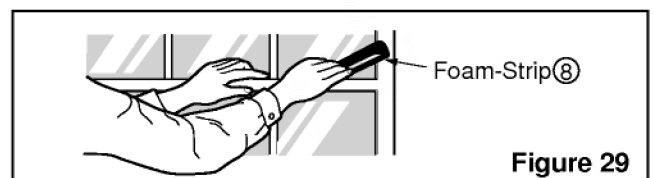


Figure 29

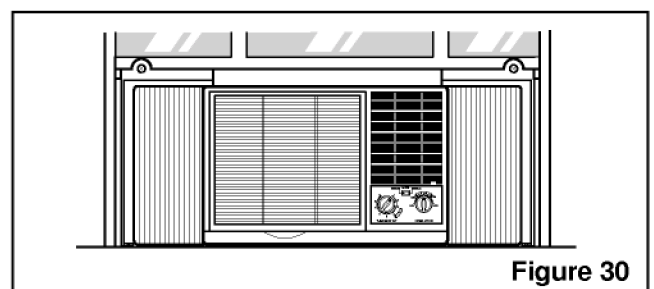
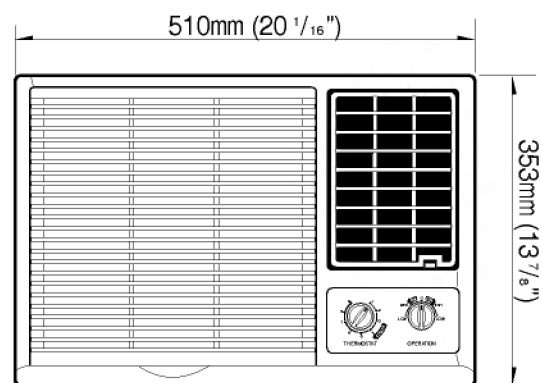
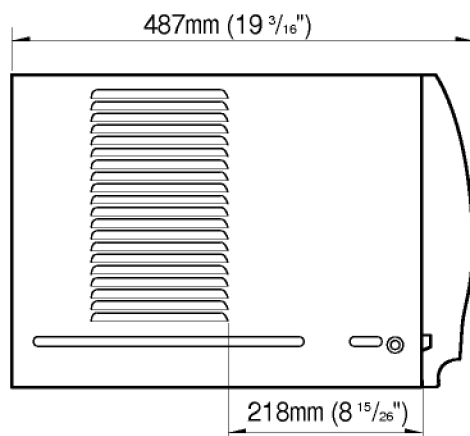
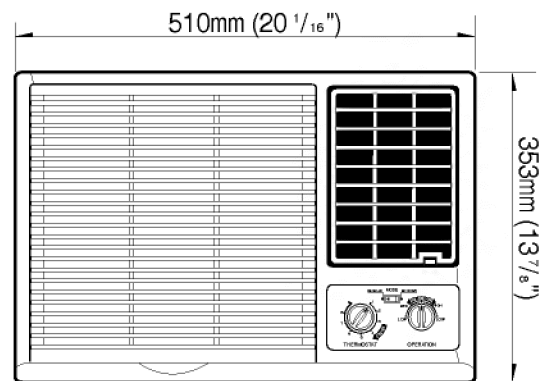
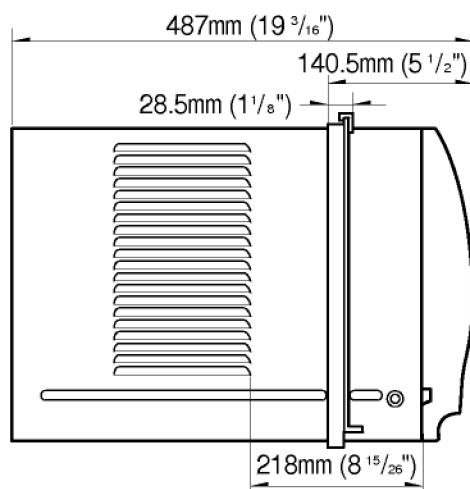


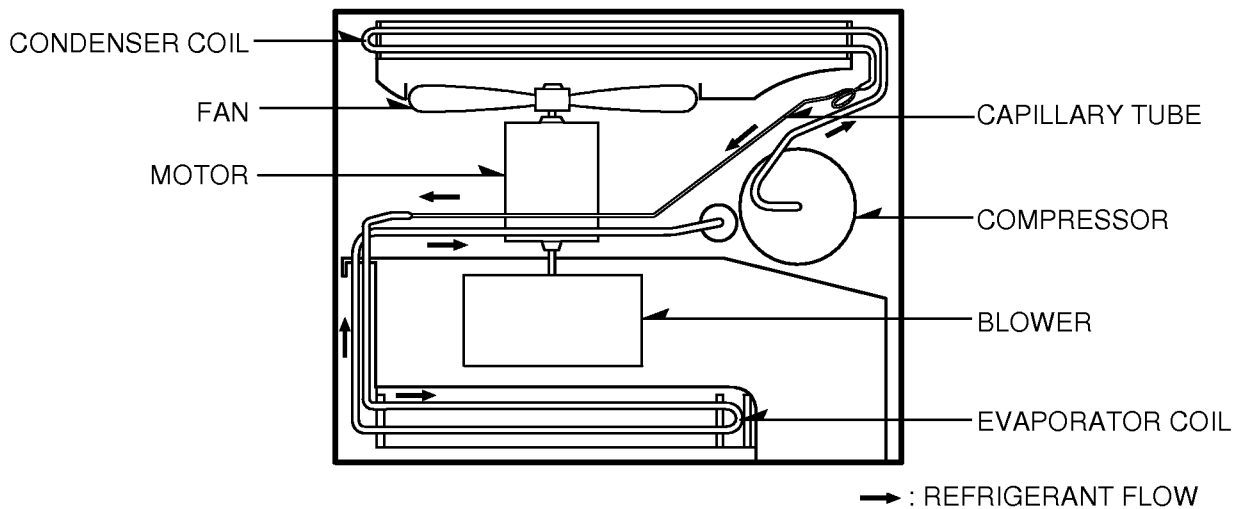
Figure 30

4. TROUBLE SHOOTING GUIDE

4.1 OUTSIDE DIMENSIONS

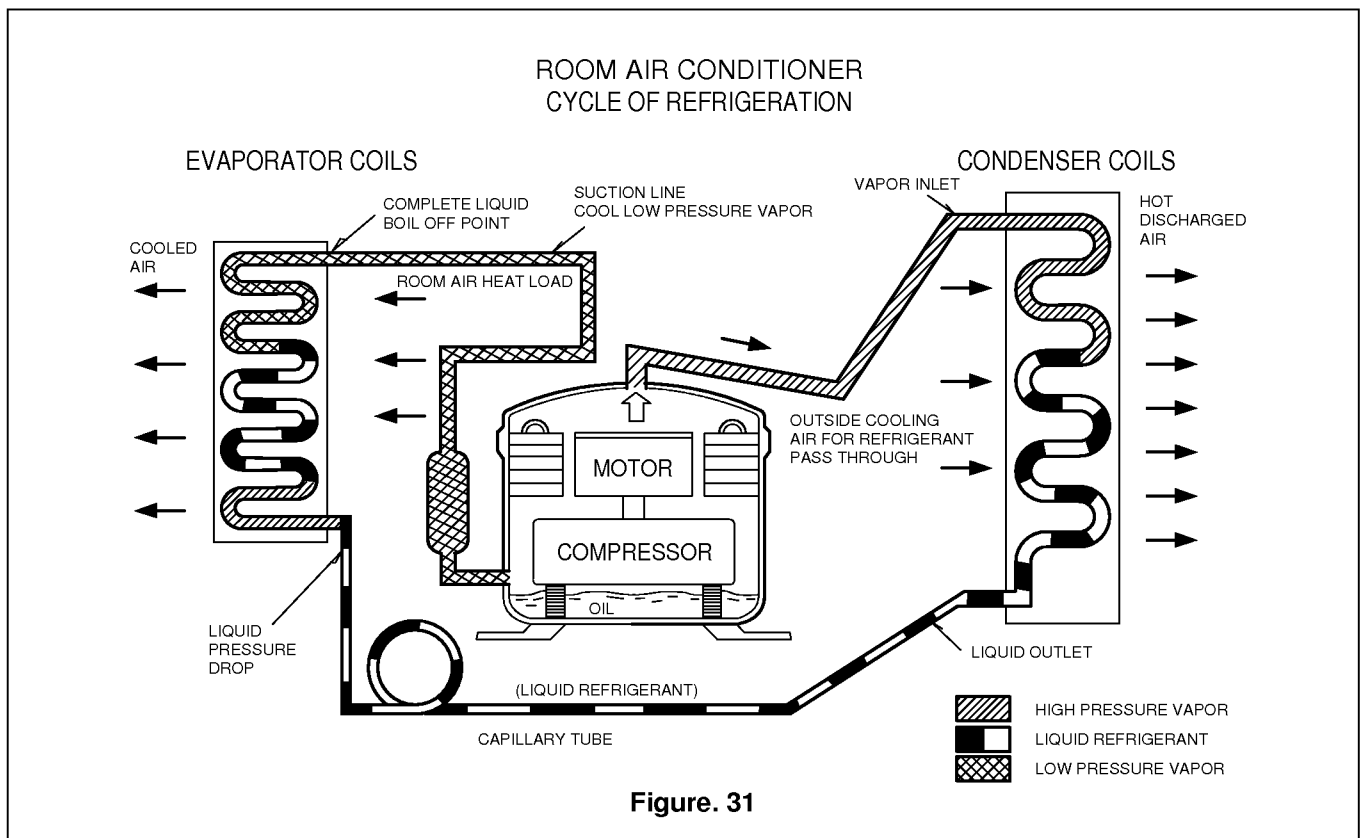


4.2 PIPING SYSTEM



Discharge the refrigerant system using a Freon™ Recovery System. If there is no valve to attach the recovery system, install one (such as a WATCO A-1) before venting the Freon™. Leave the valve in place after servicing the system. Do not vent Freon™ into the atmosphere.

The following is a brief description of the important components and their function in what is called the refrigeration system. Reference should be made to Figure. 31 to follow the refrigerating cycle and the flow of the refrigerant in the cooling cycle.

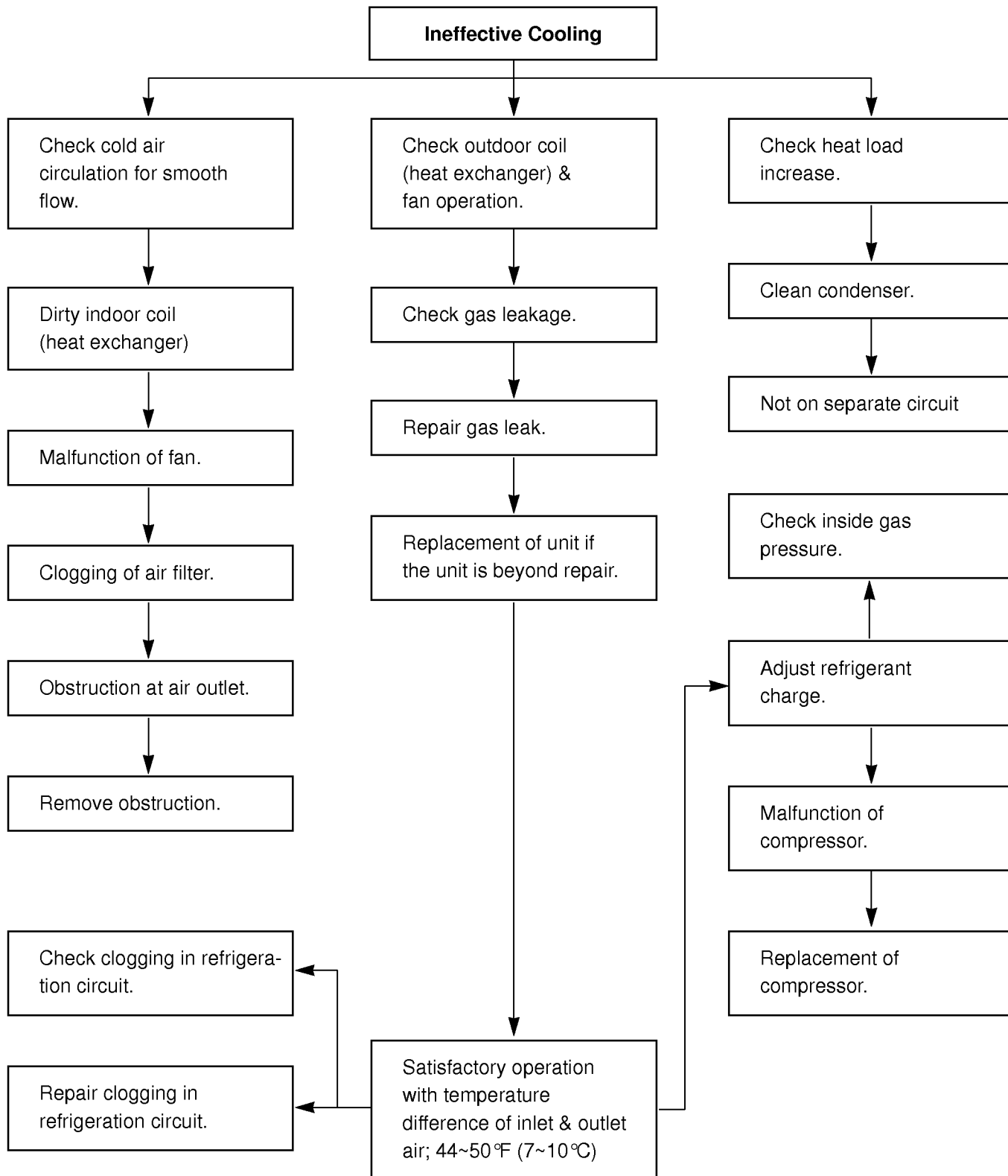


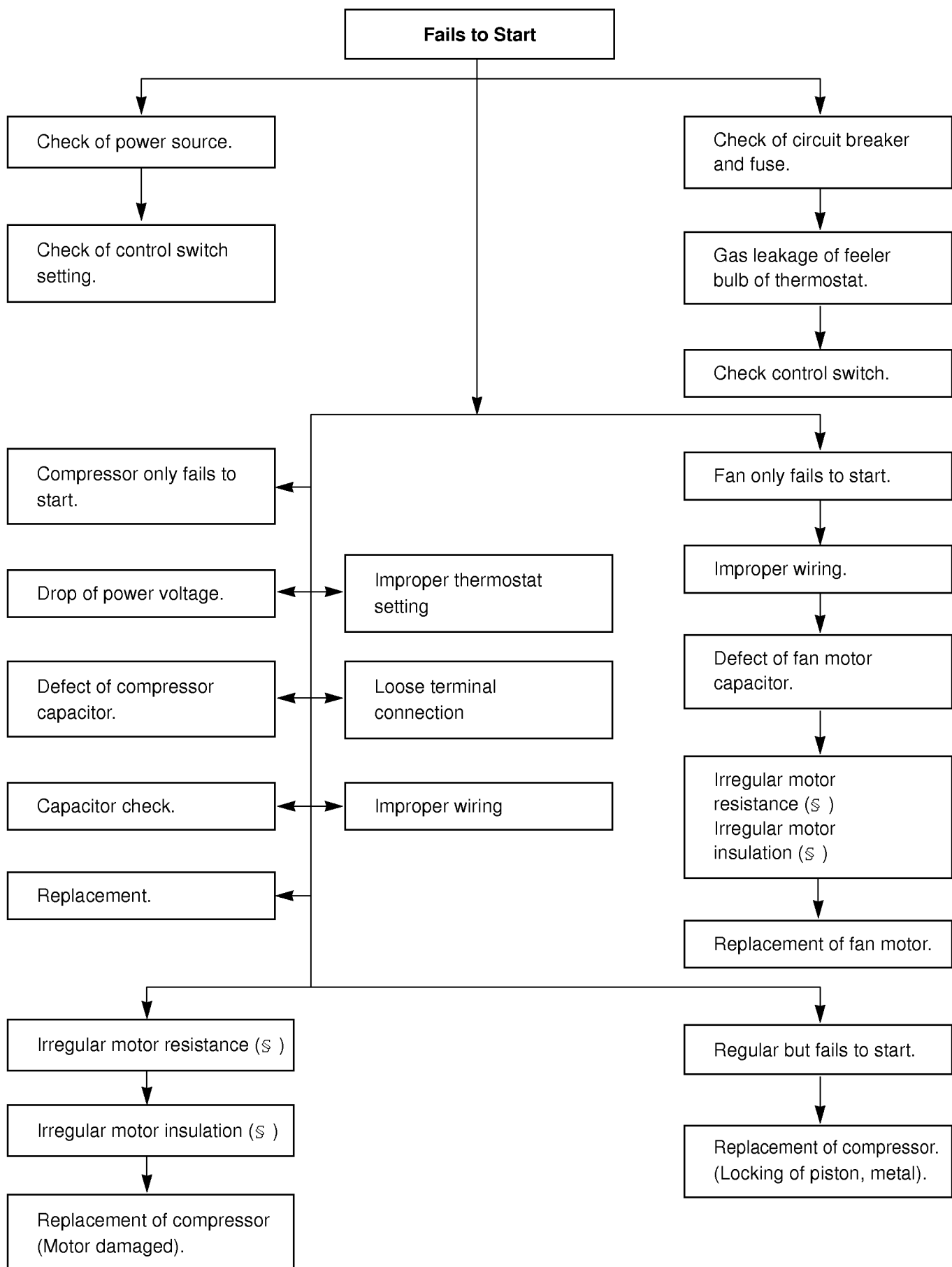
4.3 TROUBLE SHOOTING GUIDE

In general, possible trouble is classified in two kinds.

The one is so called **Starting Failure** which is caused from an electrical defect. The other is **Ineffective Air Conditioning** caused by a defect in the refrigeration circuit and improper application.

Unit is running but cooling is ineffective.





ROOM AIR CONDITIONER VOLTAGE LIMITS

NAME PLATE RATING	MINIMUM	MAXIMUM
115V	103.5V	126.5V
220V~240V	198V	264V
110V	99V	121V

COMPLAINT	CAUSE	REMEDY
Fan motor will not run.	No power	Check voltage at outlet. Correct if none.
	Power supply cord	Check voltage to rotary switch. If none, check power supply cord. Replace cord if circuit is open.
	Rotary switch	Check switch continuity. Refer to wiring diagram for terminal identification. Replace switch if none defective.
	Wire disconnected or connection loose	Connect wire. Refer to wiring diagram for terminal identification. Repair or replace loose terminal.
	Capacitor. (Discharge capacitor before testing.)	Test capacitor. Replace if not within $\pm 10\%$ of manufacturer's rating. Replace if shorted, open, or damaged.
	Will not rotate	Fan blade hitting shroud or blower wheel hitting scroll. Re-align assembly. Units using slinger ring condenser fans must have $\frac{2}{8}$ to $\frac{1}{4}$ inch clearance to the base. If it is the base, shim up the bottom of the fan motor with mounting screw(s). Check fan motor bearings; if motor shaft will not rotate, replace the motor.
Fan motor runs.	Revolves on overload.	Check voltage. See limits on this page. If not within limits, call an electrician. Test capacitor. Check bearings. Does the fan blade rotate freely? If not, replace fan motor. Pay attention to any change from high speed to low speed. If the speed does not change, replace the motor.

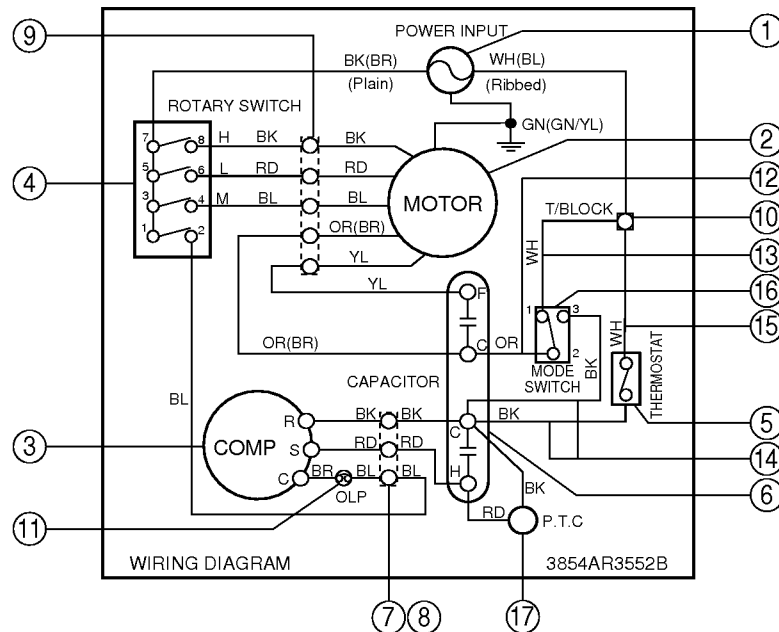
COMPLAINT	CAUSE	REMEDY
Fan motor noise.	Fan	If cracked, out of balance, or partially missing, replace it.
	Blower	If cracked, out of balance, or partially missing, replace it.
	Loose set screw	Tighten it.
	Worn bearings	If knocking sounds continue when running or loose, replace the motor. If the motor hums or noise appears to be internal while running, replace motor.
Compressor will not run, fan motor runs.	Voltage	Check voltage. See the limits on the preceding page. If not within limits, call an electrician.
	Wiring	Check the wire connections; if loose, repair or replace the terminal. If the wires are disconnected, refer to wiring diagram for identification, and replace the wires. Check the wire connections; If not according to the wiring diagram, correct the connections.
	Rotary Switch	Check for continuity, refer to the wiring diagram for terminal identification. Replace the switch if the circuit is open.
	Thermostat	Check the position of knob. If not at the coldest setting, advance the knob to this setting and restart the unit.
		Check the continuity of the thermostat. Replace the thermostat if the circuit is open.
	Capacitor (discharge capacitor before servicing.)	Check the capacitor. Replace if not within ; 10% of manufacturer's rating, replace if shorted, open, or damaged.
	Compressor	Check the compressor for open circuit or ground. If open or grounded, replace the compressor.
	Overload	Check the compressor overload, if externally mounted. Replace if open. (If the compressor temperature is high, remove the overload, cool and retest.)
Compressor cycles on overload.	Voltage	Check the voltage. See the limits on the preceding page. If voltage is not within these limits, call an electrician.
	Overload	Check overload, if externally mounted. Replace if open. (If the compressor temperature is high, remove the overload, cool, and retest.)

COMPLAINT	CAUSE	REMEDY
Compressor cycles on overload	Fan motor	If not running, determine the cause. Replace if required.
	Condenser air flow restriction	Remove the cabinet, inspect the interior surface of the condenser. If restricted, clean carefully with a vacuum cleaner (do not damage fins) or brush. Clean the interior base before re-assembling.
	Condenser fins (damaged)	If the condenser fins are closed over a large area on the coil surface, head pressures will increase, causing the compressor to cycle. Straighten the fins or replace the coil.
	Capacitor	Test the capacitor.
	Wiring	Check the terminals. If loose, repair or replace.
	Refrigeration system	Check the system for a restriction.
Insufficient cooling.	Air filter	If restricted, clean or replace.
	Exhaust damper door	Close if open.
	Unit undersized	Determine if the unit is properly sized for the area to be cooled.
Excessive noise.	Blower or fan	Check the set screw, or clamp. If loose or missing, correct. If the blower or fan is hitting scroll or barrier, rearrange the air handling parts.
	Copper tubing	Remove the cabinet and carefully rearrange the tubing not to contact the cabinet, compressor, shroud, and barrier.

5. SCHEMATIC DIAGRAM

5.1 CIRCUIT DIAGRAM

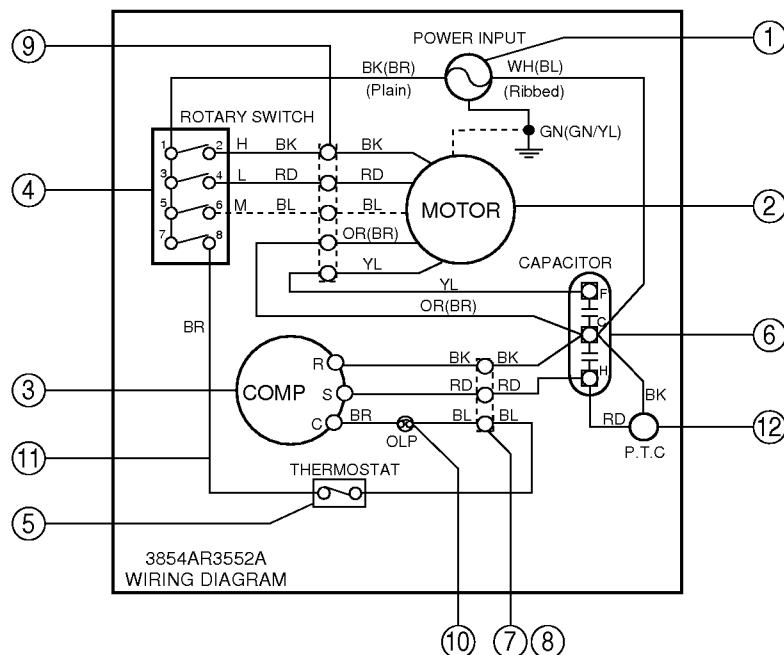
• MODEL : LW-B0811CL



S: Service Parts
O: Non Service Parts

LOCATION NO.	DESCRIPTION	PART NO.	QTY PER SET	RE-MARKS
		LW-B0811CL		
1	POWER CORD ASS'Y	2H01219B	1	S
2	MOTOR ASSY	4681AR2307A	1	S
3	COMPRESSOR	5416AR2379A	1	S
4	ROTARY SWITCH	2H00154H	1	S
5	THERMOSTAT	2H01109F	1	S
6	CAPACITOR, SH	6120AR2359A	1	S
7	CONNECTOR ASS'Y	3H03216H	1	S
8	CONNECTOR ASS'Y	6631AR3558A	1	S
9	CONNECTOR ASS'Y	4933AR3542A	1	S
10	T/BLOCK	3H00390B	1	S
11	OVERLOAD PROTECTOR	6750U-L007A	1	S
12	CONDUCTOR	6862AR2348D	1	S
13	CONDUCTOR	6862AR2348G	1	S
14	CONDUCTOR	6862AR2348E	1	S
15	CONDUCTOR	6862AR2348F	1	S
16	ROCKER SWITCH	2H01316A	1	S
17	PTC	2C00147B	1	S

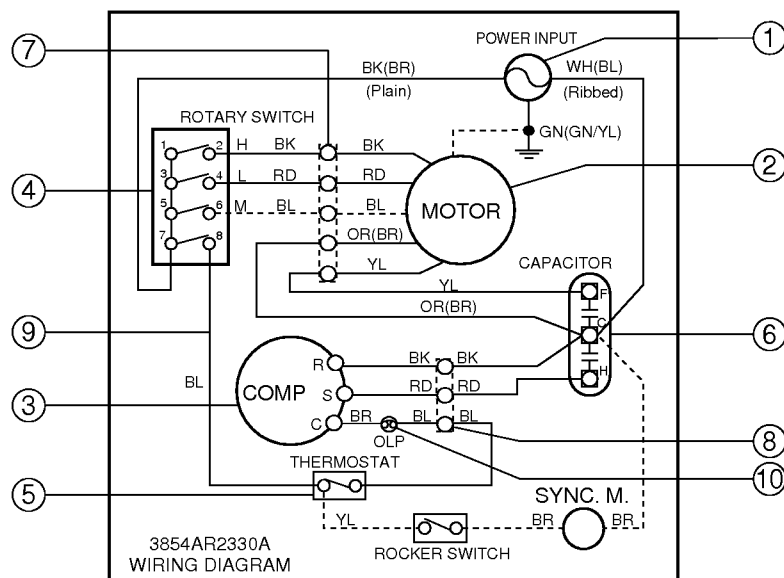
• **MODEL : LW-B0810CL/LW-B0712CL**



S: Service Parts
O: Non Service Parts

LOCATION NO.	DESCRIPTION	PART NO.		QTY PER SET	RE-MARKS
		LW-B0810CL	LW-B0712CL		
1	POWER CORD ASS'Y	2H01219B		1	S
2	MOTOR ASS'Y	4681AR2307A	4681AQ2307C	1	S
3	COMPRESSOR	5416AR2379A		1	S
4	ROTARY SWITCH	2H00154H		1	S
5	THERMOSTAT	2H01109F		1	S
6	CAPACITOR, SH	6120AR2194A		1	S
7	CONNECTOR ASS'Y	3H03216H		1	S
8	CONNECTOR ASS'Y	6631AR3558A		1	S
9	CONNECTOR ASS'Y	4933AR3542A		1	S
10	OVERLOAD PROTECTOR	6750U-L007A		1	S
11	CONDUCTOR	6862AR2187K		1	S
12	PTC	2C00147B		1	S

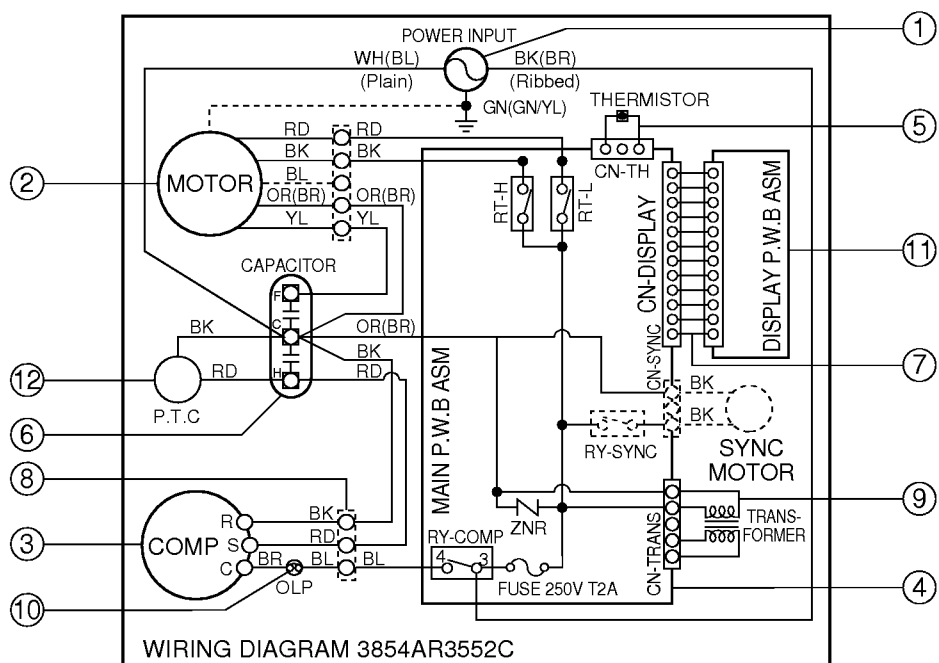
• **MODEL : LW-B0760CL/LW-B0960CL**



S: Service Parts
O: Non Service Parts

LOCATION NO.	DESCRIPTION	PART NO.		QTY PER SET	RE-MARKS
		LW-B0760CL	LW-B0960CL		
1	POWER CORD ASS'Y	2H01580T/2H01159L/3H02255E		1	S
2	MOTOR ASSY	4681AR2307D	4681AR2307E	1	S
3	COMPRESSOR	5416AR2379C	5416AR2379D	1	S
4	ROTARY SWITCH	2H00154H		1	S
5	THERMOSTAT	2H01109F		1	S
6	CAPACITOR, SH	6120AR2194A		1	S
7	CONNECTOR ASS'Y	4933AR3542A		1	S
8	CONNECTOR ASS'Y	3H03226E		1	S
9	CONDUCTOR ASS'Y	6862AR2187K		1	S
10	OVERLOAD PROTECTOR	6750U-L013A		1	S

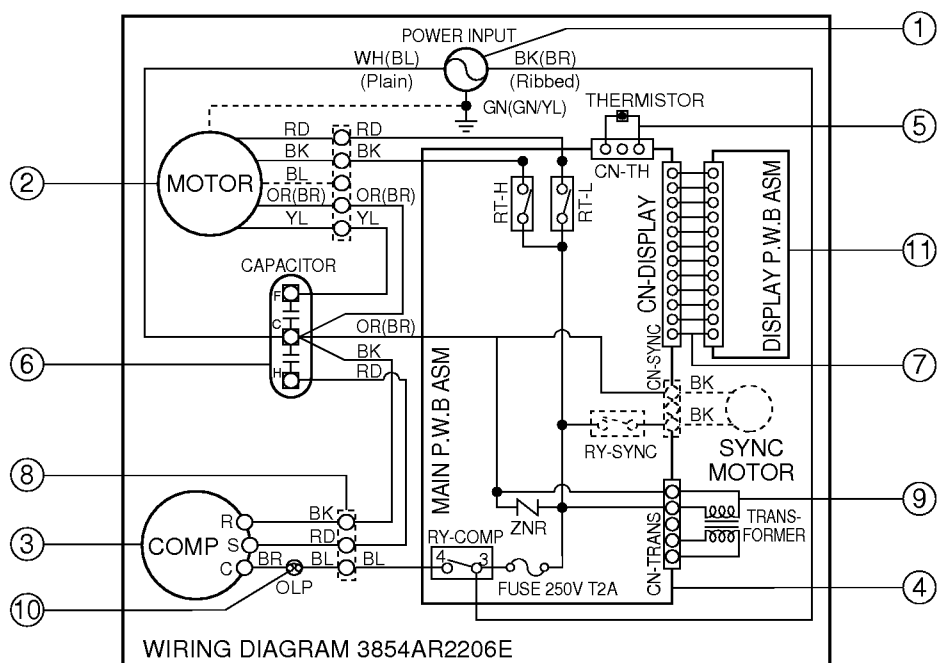
• **MODEL : LW-B0713CL**



S: Service Parts
O: Non Service Parts

LOCATION NO.	DESCRIPTION	LW-B0713CL	QTY PER SET	RE-MARKS
1	POWER CORD ASS'Y	2H01219B	1	S
2	MOTOR ASS'Y	4681AR2307C	1	S
3	COMPRESSOR	5416AR2379A	1	S
4	MAIN P.W.B ASS'Y	6871AQ2184D	1	S
5	THERMISTOR	3Q35027D	1	S
6	CAPACITOR, SH	6120AR2194A	1	S
7	CONNECTOR ASS'Y	3Q50421B	1	S
8	CONNECTOR ASS'Y	6631AR3558A	1	S
9	TRANSFORMER ASS'Y	3Q71089B	1	S
10	OVERLOAD PROTECTOR	6750U-L007A	1	S
11	DISPLAY P.W.B ASS'Y	6871AQ3073B	1	S
12	PTC	2C00147B	1	S

• MODEL : LW-B0961CL

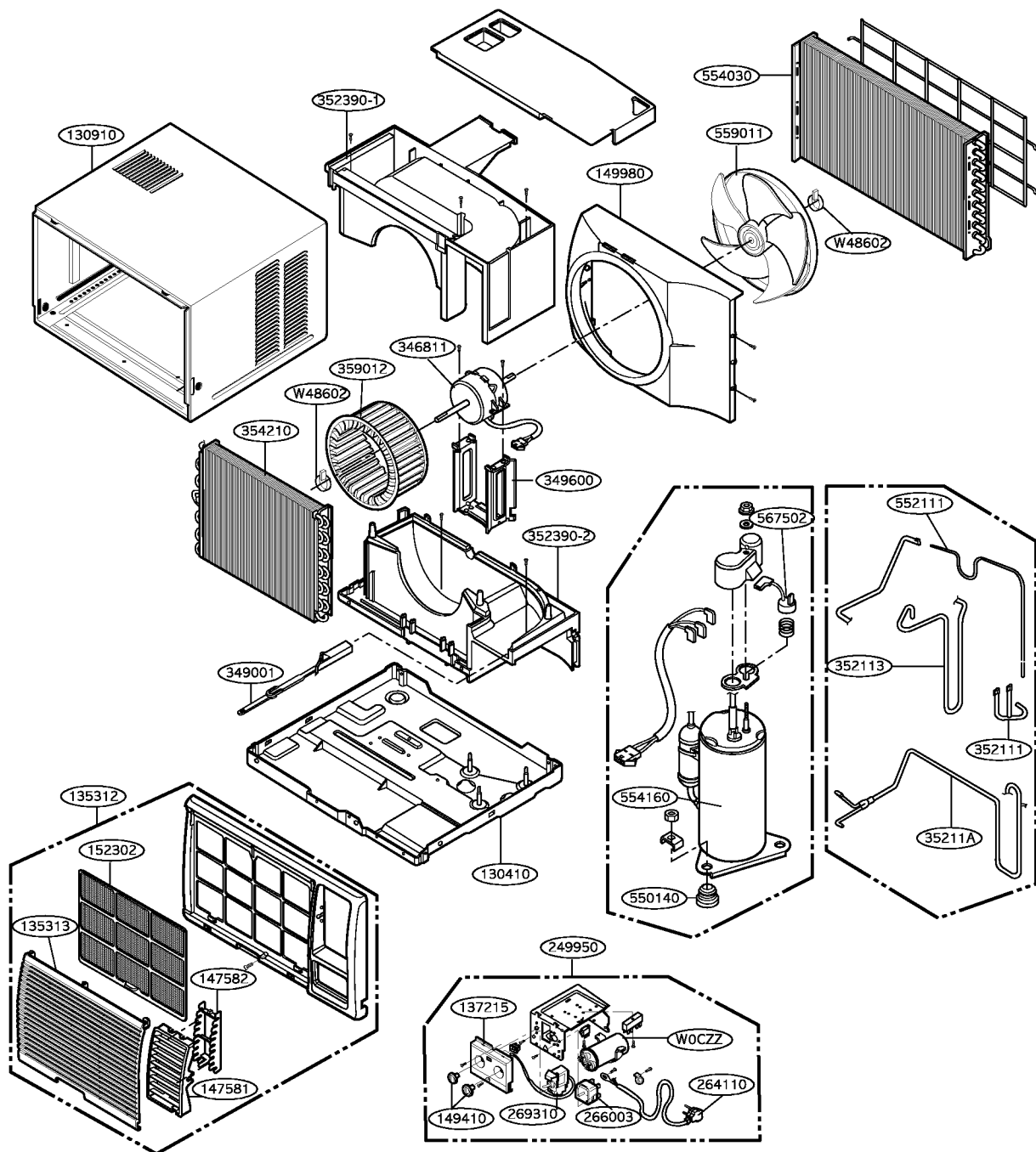


S: Service Parts
O: Non Service Parts

LOCATION NO.	DESCRIPTION	PART NO.	QTY PER SET	RE-MARKS
		LW-B0961CL		
1	POWER CORD ASS'Y	2H01580T/2H01159T/3H02255E	1	S
2	MOTOR ASS'Y	4681AR2307E	1	S
3	COMPRESSOR	5416AR2379D	1	S
4	MAIN P.W.B ASS'Y	6871AQ2184C	1	S
5	THERMISTOR	3Q35027D	1	S
6	CAPACITOR, SH	6120AR2194A	1	S
7	CONNECTOR ASS'Y	3Q50421B	1	S
8	CONNECTOR ASS'Y	6631AR3558A	1	S
9	TRANSFORMER ASS'Y	6171AQ3075A	1	S
10	OVERLOAD PROTECTOR	6750U-L013A	1	S
11	DISPLAY P.W.B ASS'Y	6871AQ3073B	1	S

Exploded View & Replacement Parts List

Exploded View LW-B0812CN . SGCGE2



Parts List

LOCATION NO	PART NO	DESCRIPTION	REMARKS
130410	3041AR2306T	BASE ASSY,SINGLE	R
130910	3091AR2317A	CABINET ASSY,SINGLE	R
135312	3531AR2841F	GRILLE ASSY,FRONT	R
135313	3530AR1404D	GRILLE,NLET	R
137215	3720AR2249K	PANEL,CONTROL	R
147581	4758AR3330A	LOUVER,HORIZONTAL	R
147582	5990AR2250D	VANE,VERTICAL	R
149410	4941AR7097B	KNOB ASSY	R
149980	4998AR1163A	SHROUD	R
152302	5230AR2246D	FILTER(MECH),A/C	R
249950	4995AR2900W	CONTROL BOX ASSY,SINGLE	R
264110	2H00677R	POWER CORD ASSY	R
266003	2H00154H	SWITCH,ROTARY	R
269310	2H01109H	THERMOSTAT ASSY	R
346811	4681A20010A	MOTOR ASSY,AC	R
349001	4900AR3324A	DAMPER,VENTILATION	R
349600	4960AR6151A	MOUNT,MOTOR	R
352111	5211AR3399A	TUBE ASSY,FORMED COND	R
352113	5210A30118A	TUBE,DISCHARGE	R
35211A	5211AR2309A	TUBE ASSY,SUCTION SINGLE	R
352390-2	5239AR3398A	AIR GUIDE ASSY	R
352390-1	5239AR3401A	AIR GUIDE ASSY	R
354210	5421AR2308A	EVAPORATOR ASSY	R
359012	5834AR1168B	FAN ASSY,BLOWER	R
550140	4H00982C	ISOLATOR,COMP	R
552111	5424AR3549A	TUBE,CAPILLARY BEND	R
554030	5403AR2312A	CONDENSER ASSY	R
554160	5416A20004A	COMPRESSOR	R
559011	5900AR1167B	FAN ASSY,AXIAL	R
567502	6750U-L030A	O.L.P	R
W0CZZ	6120AR2194C	CAPACITOR	R
W48602	3H02932B	CLAMP,SPRING	R