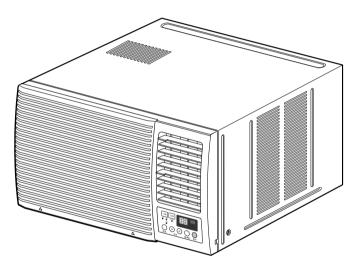


# ROOM AIR CONDITIONER SERVICE MANUAL

#### CAUTION

- BEFORE SERVICING THE UNIT,
- READ THE "SAFETY PRECAUTIONS" IN THIS MANUAL.
- ONLY FOR AUTHORIZED SERVICE



MODEL: LWM1430TAS, BXN/LW-136

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## 1. PREFACE

This service manual provides various service information, including 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, set the POWER of CONTROL BOARD 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, make an insulation resistance test to prevent the customer's exposure 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 and yellow) is to 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 Mode [except POWER OFF].
- 4. The value should be over 1 M $\Omega$ .

MODELS		DELS	LWM1430TAS/LW-136	
ITEMS	TEMS		LWW14301A3/LW-130	
POWER SUPPLY			1Ø, 208-230V, 60Hz	
COOLING CAPAC	CITY (Btu/h	ı)	14,800	
INPUT (W)			1,410	
RUNNING CURRI	ENT (A)		6.5	
REFRIGERANT C	HARGE (g	g)	690(24.3 OZ)	
OPERATING	INDOOF	R (°C)	26.7(DB) 19.4(WB)	
TEMPERATURE	OUTDO	OR (°C)	35(DB) 23.9(WB)	
FAN, INDOOR			BLOWER	
FAN, OUTDOOR			PROPELLER TYPE FAN WITH SLINGER-RING	
FAN SPEEDS, FA	N/COOLIN	١G	3/3	
FAN MOTOR			6 POLES	
OPERATION CON	OPERATION CONTROL		TOUCH PANEL	
ROOM TEMP. CC	NTROL		THERMISTOR	
			VERTICAL LOUVER(RIGHT & LEFT)	
AIR DIRECTION	AIR DIRECTION CONTROL		HORIZONTAL LOUVER(UP & DOWN)	
CONSTRUCTION SLIDE IN-OUT CHASSIS		SLIDE IN-OUT CHASSIS		
PROTECTOR			COMPRESSORINTERNAL OVERLOAD PROTECTOR	
			FAN MOTORINTERNAL THERMAL PROTECTOR	
			1.6m (3 WIRE WITH GROUNDING)	
POWER CORD			ATTACHMENT PLUG(CORD-CONNECTED TYPE)	
DRAIN SYSTEM			DRAIN PIPE OR SPLASHED BY FAN SLINGER	
NET WEIGHT (lbs/kg)			110/50	
OUTSIDE DIMEN	SION	(inch)	26 x 16 <sup>27</sup> / <sub>32</sub> x 26 <sup>9</sup> / <sub>16</sub>	
(W x H x D)	(W x H x D) (mm)		660 x 428 x 675	

#### **1.3 SPECIFICATIONS**

\* DB:Dry Bulb \*\* WB:Wet Bulb

NOTE : Specifications are subject to minor change without notice for further improvement.

#### **1.4 FEATURES**

- Designed for cooling only.
- Powerful and quiet cooling.
- Slide-in and slide-out chassis for the simple installation and service.
- Reversible inlet grille.

#### **1.5 CONTROL LOCATIONS**

#### VENTILATION

The ventilation lever must be in the CLOSE position in order to maintain the best cooling conditions. When a 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 the lever, as shown. First, pull down part (A) to horizontal line with part (B).

**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.

#### **/** POWER BUTTON

Operation starts, when this button is pressed and stops when you press the button again.

#### **2** OPERATION MODE SELECTION BUTTON

Select Cooling, or Fan or Dehumidification(Dry) mode with button. (Dry mode is not to all models.)

#### **3** ON/OFF TIMER BUTTON

Set the time of starting and stopping operation. The timer is set by 1 hour.

#### **4** FAN SPEED SELECTOR

Select the fan speed in three steps. - High [F3] → Low[F1] → Med[F2]→ High[F3]....

#### **5** ROOM TEMPERATURE SETTING BUTTON

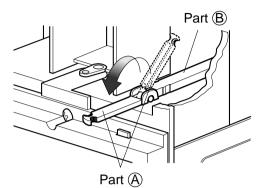
Control the room temperature within a range of 60°F to 86°F by 1°F.

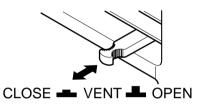
#### 6 AUTO SWING

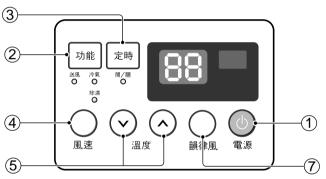
Control the horizontal air direction by air swing system.

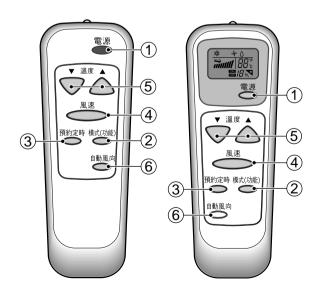
-4-

- Side air-intake, side cooled-air discharge.
- Built in adjustable THERMISTOR.
- Washable one-touch filter.
- Compact size.









### 2. DISASSEMBLY INSTRUCTIONS

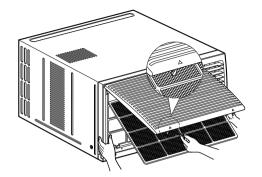
- Before the following disassembly, POWER SWITCH is set to OFF and disconnected the power cord.

#### 2.1 MECHANICAL PARTS

#### 2.1.1 FRONT GRILLE

- 1. Open the inlet grille upward or downward.
- 2. Remove the screw which fastens the front grille.
- 3. Pull the front grille from the right side.
- 4. Remove the front grille. (See Fig. 1)
- 5. Re-install the component by referring to the removal procedure.

**NOTE:** Mark  $\Delta$  of inlet grille means opening direction.



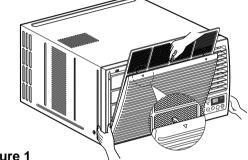


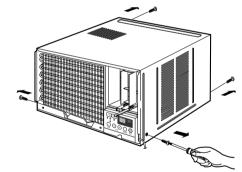
Figure 1

#### 2.1.2 CABINET

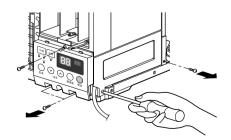
- 1. After disassembling the FRONT GRILLE, remove the screws which fasten the cabinet at both sides. Keep these for later use.
- 2. Remove the two screws which fasten the cabinet at back. (See Fig. 2)
- 3. Pull the base pan forward.

#### 2.1.3 CONTROL BOX

- 1. Remove the front grille. (Refer to section 2.1.1)
- 2. Pull the base pan forward so that you can remove the 2 screws which fasten the cover control at the right side. (See Fig. 3)
- 3. Remove the 3 screws which fasten the control box. (See Fig. 3)
- 4. Discharge the capacitor by placing a 20,000 ohm resistor across the capacitor terminals.
- 5. Disconnect two wire housings in the control box.
- 6. Pull the control box forward completely.
- 7. Re-install the components by referring to the removal procedure. (See Fig. 3) (Refer to the circuit diagram found on page 24 in this manual and on the control box.)









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#### 2.2 AIR HANDLING PARTS

#### 2.2.1 COVER (AT THE TOP)

- 1. Remove the front grille. (Refer to section 2.1.1)
- 2. Remove the cabinet. (Refer to section 2.1.2)
- 3. Remove 11 screws which fasten the brace and covers.
- 4. Remove the covers and the brace. (See Fig. 4)
- 5. Re-install the components by referring to the removal procedure, above.

#### 2.2.2 BLOWER

2.2.3 FAN

- 1. Remove the cover. (Refer to section 2.2.1)
- Remove the 3 screws which fasten the evaporator at the left side and the top side. (See Fig. 4)
- 3. Move the evaporator sideward carefully.
- 4. Remove the orifice from the air guide carefully.
- 5. Remove the clamp spring which is clamped to the boss of blower by hand plier. (See Fig. 5)
- 6. Pull the blower outward, without touching blades. (See Fig. 6)
- 7. Re-install the components by referring to the removal procedure, above.

1. Remove the cabinet. (Refer to section 2.1.2)

3. Remove the 5 screws which fasten the condenser.

2. Remove the brace and shroud cover.

4. Move the condenser sideways carefully.5. Remove the clamp which secures the fan.

7. Re-install the components by referring to the

(Refer to section 2.2.1)

6. Remove the fan. (See Fig. 7)

removal procedure, above.

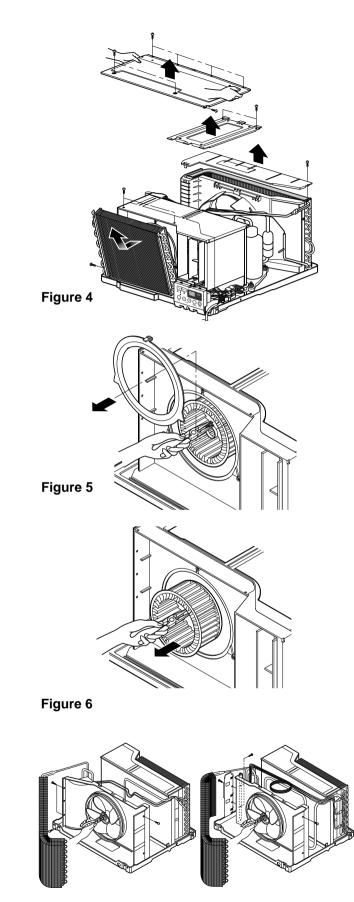


Figure 7 (a)

Figure 7 (b)

#### —6—

#### 2.2.4 SHROUD

- 1. Remove the fan. (Refer to section 2.2.3)
- 2. Remove the 2 screws which fasten the shroud.
- 3. Remove the shroud. (See Fig. 8)
- 4. Re-install the component by referring to the removal procedure, above.

#### 2.3 ELECTRICAL PARTS

#### 2.3.1 MOTOR

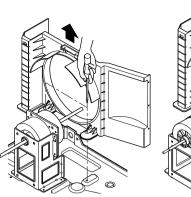
- 1. Remove the cabinet. (Refer to section 2.1.2)
- Remove the cover control and disconnect a wire housing in control box. (Refer to section 2.1.3)
- 3. Remove the blower. (Refer to section 2.2.2)
- 4. Remove the fan. (Refer to section 2.2.3)
- 5. Remove the 4 screws which fasten the motor. (See Fig. 9)
- 6. Remove the motor.
- 7. Re-install the components by referring to the removal procedure, above.

#### 2.3.2 COMPRESSOR

- 1. Remove the cabinet. (Refer to section 2.1.2)
- 2. Discharge the refrigerant by using a Refrigerant Recovery System.
- 3. Disconnect the 3 leads from the compressor.
- 4. After purging the unit completely, unbraze the suction and discharge tubes at the compressor connections.
- 5. Remove the 3 nuts and the 3 washers which fasten the compressor. (See Fig. 10)
- 6. Remove the compressor.
- 7. Re-instill the components by referring to the removal procedure, above.

#### 2.3.3 CAPACITOR

- 1. Remove the control box. (Refer to section 2.1.3)
- 2. Remove the screw which fasten the display panel.
- 3. Disconnect the 2 leads from the rocker switch and remove the panel.
- 4. Remove a screw and unfold the control box. (See Fig. 11)
- 5. Remove the screw and the clamp which fastens the capacitor. (See Fig. 11)
- 6. Disconnect all the leads of capacitor terminals.
- 7. Re-install the components by referring to the removal procedure, above.



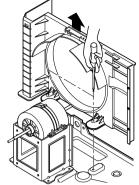
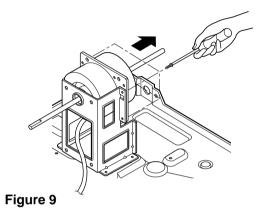
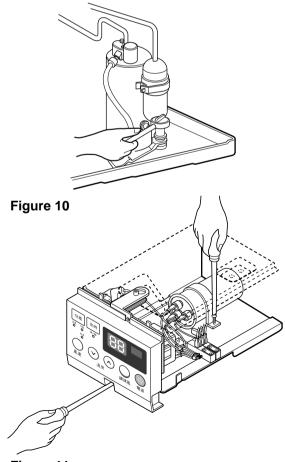


Figure 8 (a)

Figure 8 (b)







#### 2.3.4 POWER CORD

- 1. Remove the control box. (Refer to section 2.1.3)
- 2. Unfold the control box. (Refer to section 2.3.3)
- 3. Disconnect the grounding screw from the control box.
- 4. Disconnect 2 receptacles.
- 5. Remove a screw which fastens the clip cord.
- 6. Pull the power cord. (See Fig. 12)
- 7. Re-install the component by referring to the removal procedure, above.
  (Use only one ground-marked hole ) for ground connection.)
- 8. If the supply cord of this appliance is damaged, it must be replaced by the special cord.(The special cord means the cord which has the same specification marked on the supply cord fitted to the unit.)

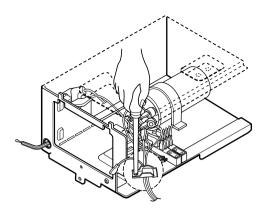
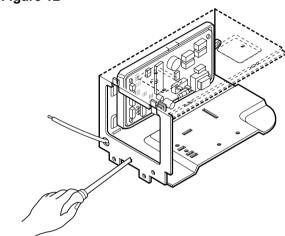


Figure 12

#### 2.3.5 THERMISTOR

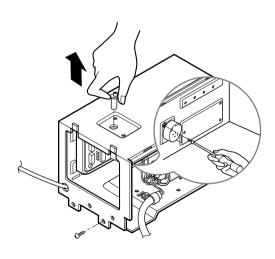
- 1. Remove the control box. (Refer to section 2.1.3)
- 2. Unfold the control box. (Refer to section 2.3.3)
- 3. Disconnect the thermistor terminals from main P.W.B assembly.
- 4. Remove the thermistor.
- 5. Re-install the components by referring to the removal procedure above. (See Figure 13)





#### 2.3.6 SYNCHRONOUS MOTOR

- 1. Remove the control box. (Refer to section 2.1.3)
- 2. Unfold the control box. (Refer to section 2.3.3)
- 3. Remove the crankshaft.
- 4. Disconnect all the leads of the synchronous motor.
- 5. Remove the 2 screws which fasten the synchronous motor. (See Fig. 14)
- 6. Re-install the components by referring to the removal procedure, above.





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#### 2.4 REFRIGERATION CYCLE

#### CAUTION

Discharge the refrigerant system using 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<sup>™</sup>. Leave the valve in place after servicing the system.

#### 2.4.1 CONDENSER

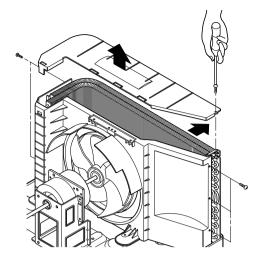
- 1. Remove the cabinet. (Refer to section 2.1.2)
- 2. Remove the brace and the shroud cover. (Refer to section 2.2.1)
- 3. Remove the 5 screws which fasten the condenser.
- 4. After discharging the refrigerant completely, unbraze the interconnecting tube at the condenser connections.
- 5. Remove the condenser.
- 6. Re-install the components by referring to notes. (See Fig. 15)

#### 2.4.2 EVAPORATOR

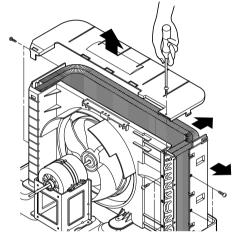
- 1. Remove the cabinet. (Refer to section 2.1.2)
- 2. Remove the top cover and the brace. (Refer to section 2.2.1)
- 3. Discharge the refrigerant completely.
- 4. Remove the 3 screws which fasten the evaporator at the left side and the top side.
- 5. Move the evaporator sideward carefully and then unbraze the interconnecting tube at the evaporator connectors.
- 6. Remove the evaporator.
- 7. Re-install the components by referring to notes. (See Fig. 16)

#### 2.4.3 CAPILLARY TUBE

- 1. Remove the cabinet. (Refer to section 2.1.2)
- 2. Remove the brace. (Refer to section 2.2.1)
- 3. After discharging the refrigerant completely, unbraze the interconnecting tube at the capillary tube.
- 4. Remove the capillary tube.
- 5. Re-install the components by referring to notes.

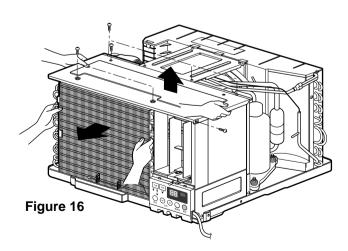








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NOTES

- Replacement of the refrigeration cycle.
- When replacing the refrigeration cycle, be sure to discharge the refrigerant system using a Freon<sup>™</sup> recovery System.

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

- 2. After discharging the unit completely, remove the desired component, and unbrace 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 Service valves.
- 5. Evacuate as follows.
  - 1) Connect the vacuum pump, as illustrated Fig. 17A.
  - Start the vacuum pump, slowly open manifold valves A and B with two full turns counterclockwise and leave the valves closed. The vacuum pump is now pulling through valves A and B up to valve C by means of the manifold and entire system.

#### 

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

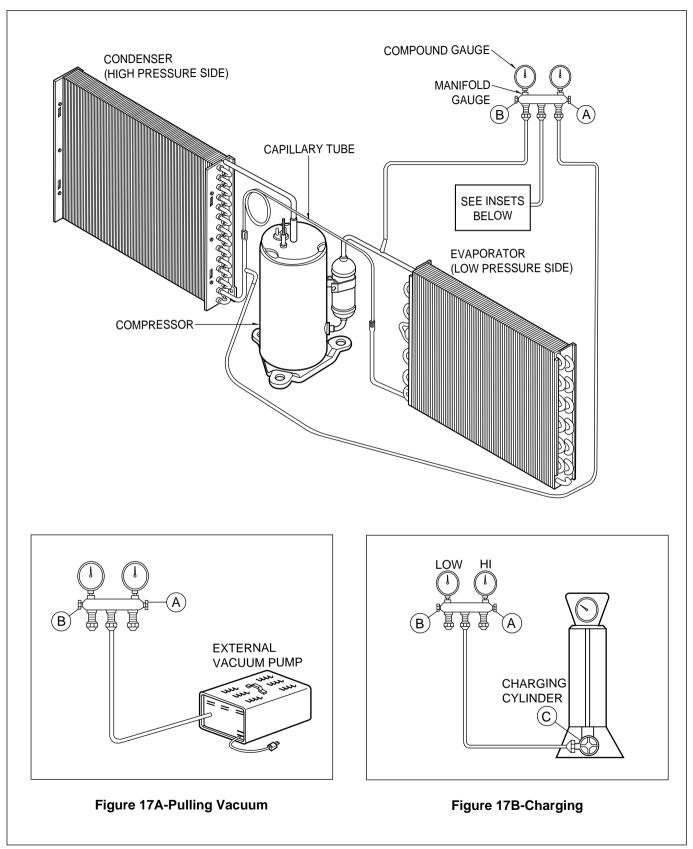
- 3) Operate the vacuum pump for 20 to 30 minutes, until 600 microns of vacuum is obtained. Close valves A and B, and observe vacuum gauge for a few minutes. A rise in pressure would indicate a possible leak or moisture remaining in the system. With valves A and B closed, stop the vacuum pump.
- Remove the hose from the vacuum pump and place it on the charging cylinder. See Fig. 17B. Open valve C.

Discharge the line at the manifold connection.

5) The system is now ready for final charging.

- 6. Recharge as follows :
- Refrigeration 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.
- Connect the charging cylinder as shown in Fig. 17B. With valve C open, discharge the hose at the manifold connection.
- 3) Open valve A and allow the proper charge to enter the system. Valve B is still closed.
- 4) If more charge is required, the high-side will 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 Lowside.
  - 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 satisfied the unit is operating correctly, use the pinch-off tool with the unit still running and 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, 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.



### **3. INSTALLATION**

### 3.1 HOW TO INSTALL THE UNIT

- 1. To avoid 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. If the unit receives direct sunlight, build an awning to shade the cabinet.
- 3. There should be no obstacle, like a fence, within 20" which might restrict heat radiation from the condenser.
- 4. To prevent reducing performance, install the unit so that louvers of the cabinet are not blocked.
- 5. Install the unit a little obliquely outward not to leak the condensed water into the room (about 1/2" or 1/4" bubble with level).
- 6. Install the unit with its bottom portion 30~60" above the floor level.
- 7. Stuff the foam between the top of the unit and the wall to prevent air and insects from getting into the room.
- 8. The power cord must be connected to an independent circuit. The green wire must be grounded.
- 9. Connect the drain tube to the base pan hole in the rear side if you need to drain (consult a dealer).

Plastic hose or equivalent may be connected to the drain tube.

#### 3.2. HOW TO DRAIN (When using drain pipe)

The air conditioner must be installed horizontally or tilted slightly to the outside for proper water drainage. On exceptionally hot and humid days the air conditioner may overflow condensed water. If the air conditioner is used in a hot and high humidity zone, exchange the ① HOLE RUBBER for the ② DRAIN PIPE.(See figure 17, figure 18.) Press the drain pipe into the hole by pushing down and away from the fins to avoid injury

#### 3.3 HOW TO USE THE REVERSIBLE INLET GRILLE

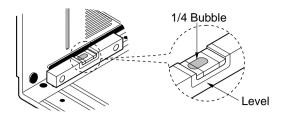
The grille is designed to clean the filter both upward and downward.

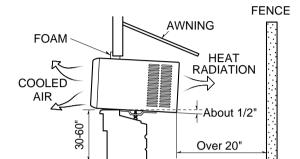
#### A. BEFORE ATTACHING THE FRONT GRILLE TO THE CABINET, IF YOU WANT TO PULL OUT THE FILTER UPWARD;

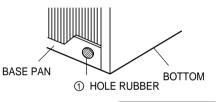
- 1. Open the inlet grille slightly (a).
- 2. Turn inside out the front grille (a).
- 3. Disassemble the inlet grille from the front grille with separating the hinged part by inserting a straight type screw-driver tip (b).
- 4. Then, rotate the inlet grille 180 degrees and insert the hooks into bottom holes of the front grille.
- 5. Insert the filter and attach the front grille to the cabinet.

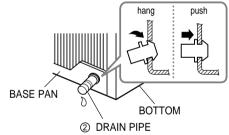
#### B. IF YOU WANT TO PULL OUT THE FILTER DOWNWARD;

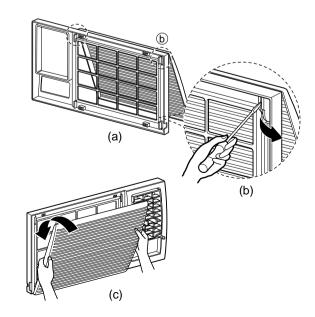
The grille is already designed for that way.











#### **3.4 WINDOW REQUIREMENTS**

NOTE: All supporting parts should be secured to firm wood, masonry, or metal. The models of the specific area don't contain installation feit.

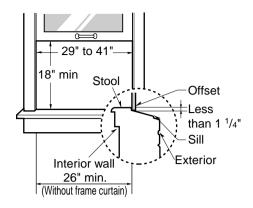
#### **3.4.1 WINDOW REQUIREMENTS**

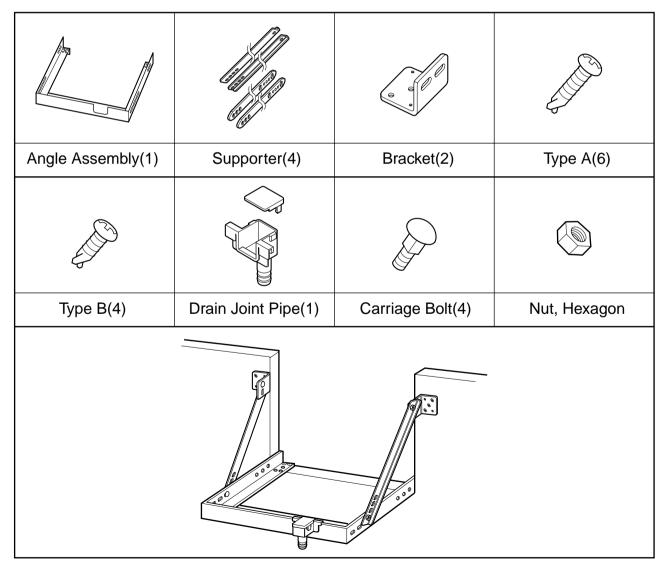
 This unit is designed for installation in standard double hung windows with actual opening widths from 29" to 41".

The top and bottom window sashes must open sufficiently to allow a clear vertical opening of 18" 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 <sup>1</sup>/<sub>4</sub>".

#### **3.5 INSTALLATION KITS CONTENTS**

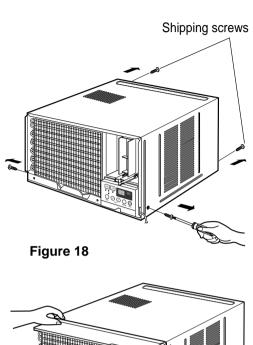




#### **3.6 SUGGESTED TOOL REQUIREMENTS**

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

- Remove the screws which fasten the cabinet at both sides and at the back. Keep these two screws which fasten the cabinet at both sides for later use.
- 2. Slide the unit out from the cabinet by gripping the base pan handle and pulling forward while bracing the cabinet.
- 3. Cut the window sash seal to the proper length. Peel off the backing and attach the Foam-PE to the underside of the window sash.
- 4. Remove the backing from Foam-PE with 3 holes and attach it to the bottom of the Top retainer bar.
- 5. Attach the Top retainer bar onto the top of the cabinet with 3 screws (Type A).
- 6. Insert the Frame guides into the bottom of the cabinet.
- 7. Insert the Frame Curtain into the Top retainer bar and Frame guides.
- 8. Fasten the curtains to the unit with 10 screws (Type A) at both sides.



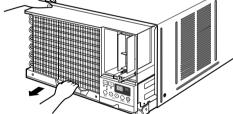
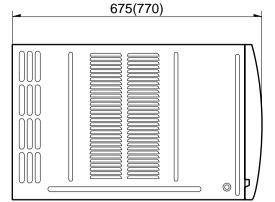
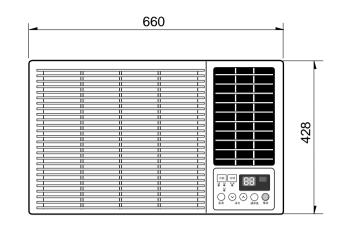


Figure 19

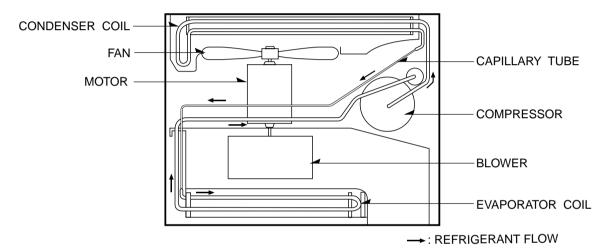
## 4. TROUBLESHOOTING GUIDE

#### 4.1 OUTSIDE DIMENSIONS

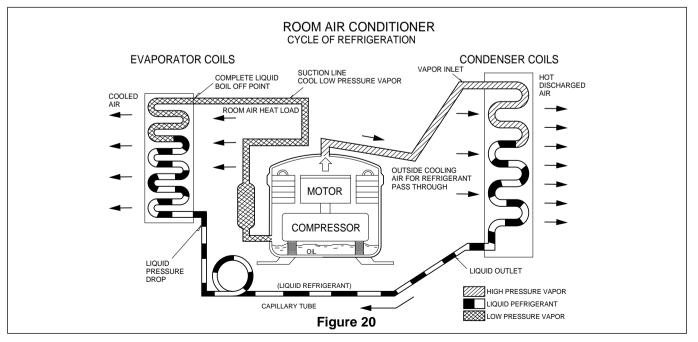




#### 4.2 PIPING SYSTEM



Following is a brief description of the important components and their functions in the refrigeration system. Refer to Fig. 20 to follow the refrigeration cycle and the flow of the refrigerant in the cooling cycle.

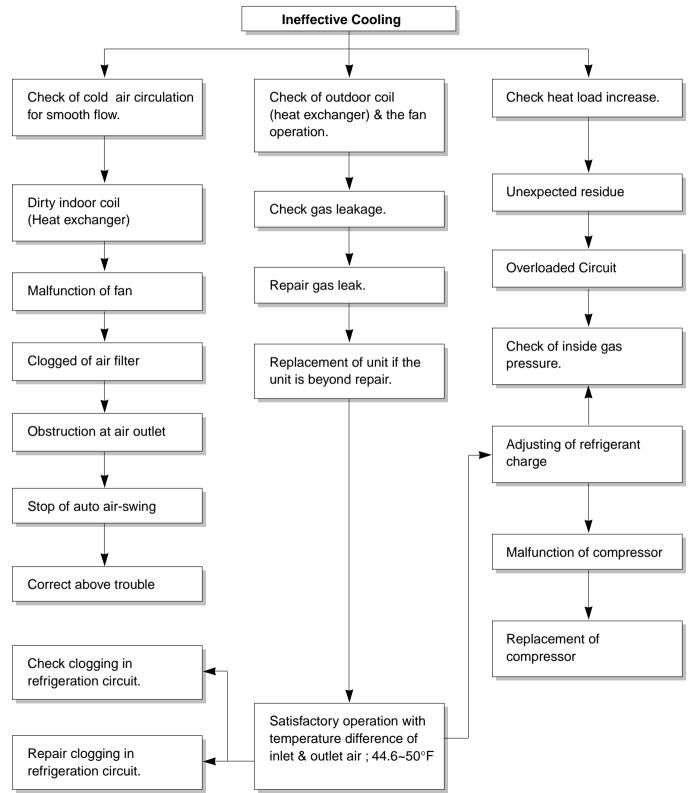


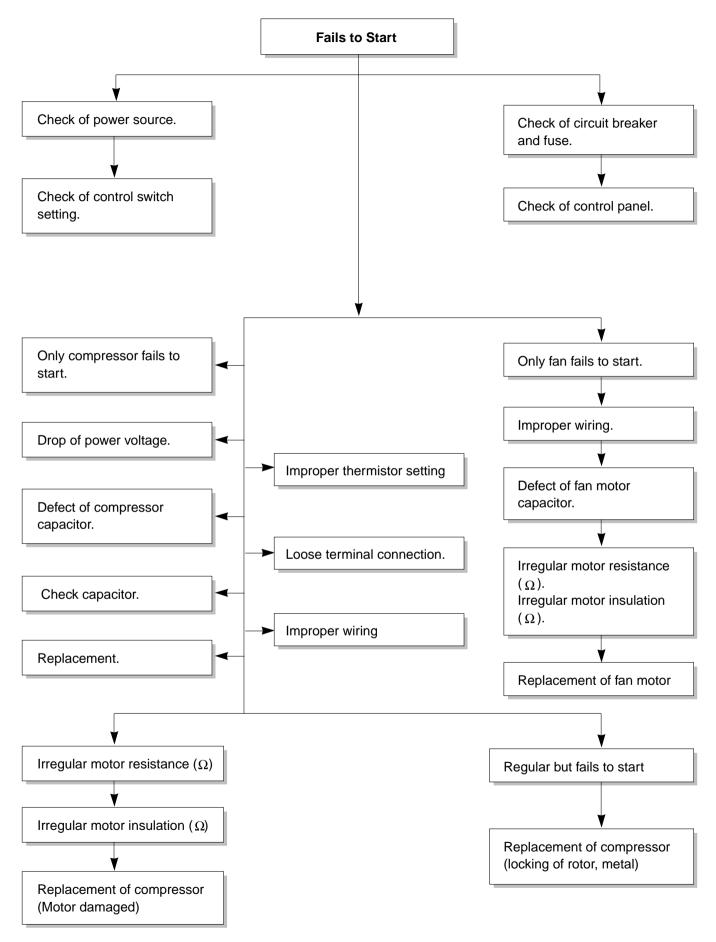
#### 4.3 TROUBLESHOOTING GUIDE

In general, possible trouble is classified in two causes.

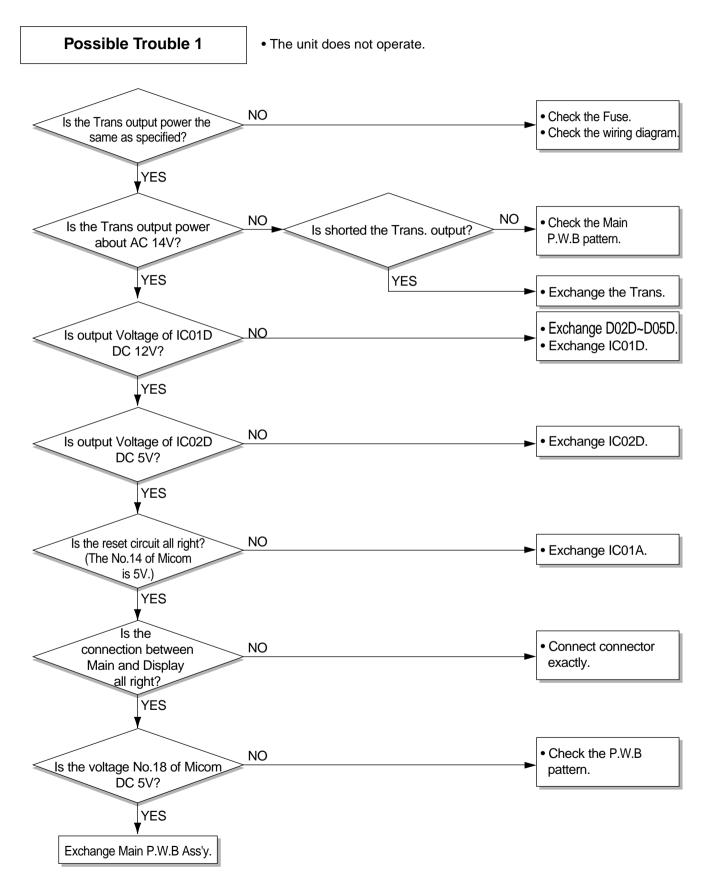
The one is called Starting Failure which is caused from an electrical defect, and the other is Ineffective Air Conditioning caused by a defect in the refrigeration circuit and improper application.

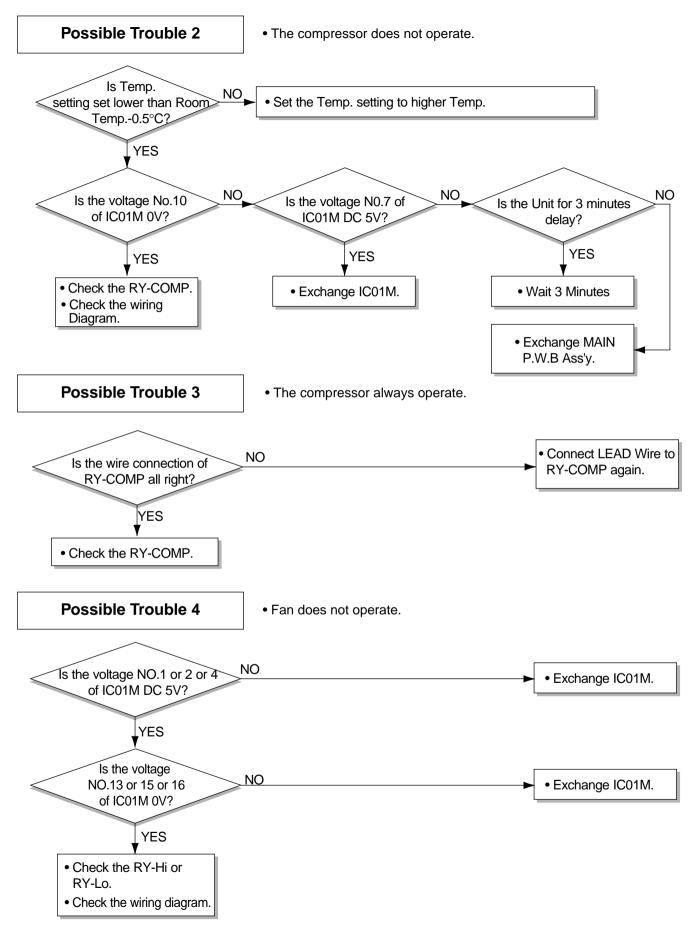
#### Unit runs but poor cooling



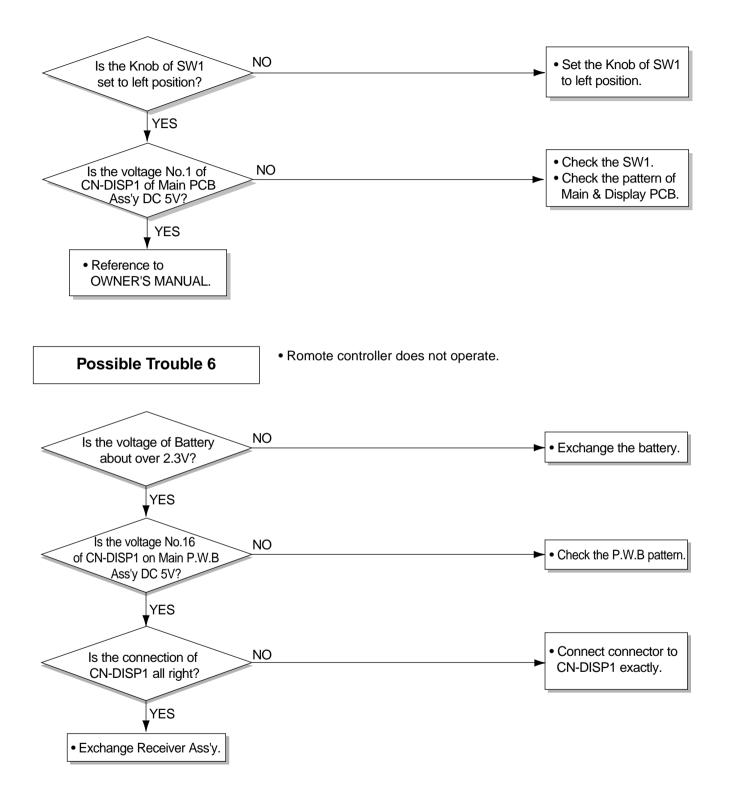


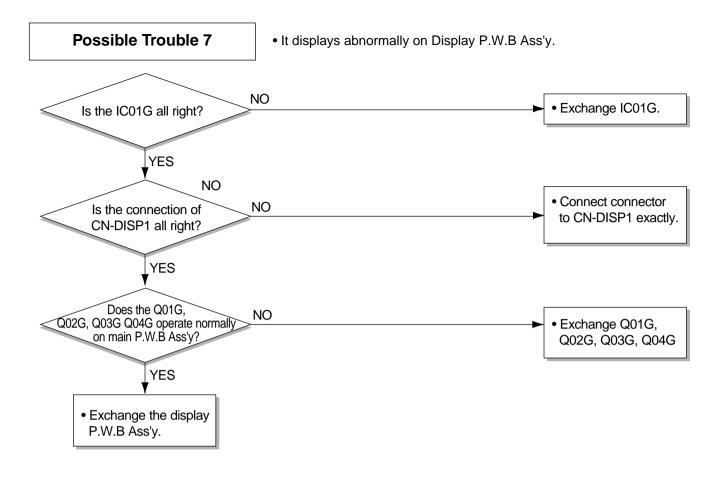
#### ELECTRIC PARTS TROUBLESHOOTING GUIDE:











#### ROOM AIR CONDITIONER VOLTAGE LIMITS

NAME PLATE RATING	MINIMUM	MAXIMUM
AC 208-230V ±10%	AC 187V	AC 253V

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 power supply cord. Replace cord if cir open.			
	Rotary switch       Check switch continuity. Refer to wiring for terminal identification. Replace switc 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 ±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 0.22~0.25 inch clearance to the base. If necessary, 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.		

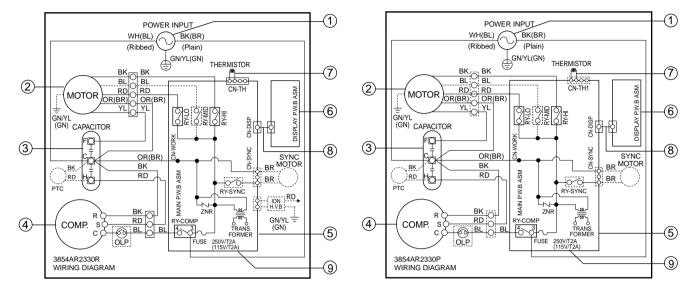
COMPLAINT	CAUSE	REMEDY		
Fan motor noise.	Fan	If cracked, out of balance, or partially missing, replace it.		
	Blower	If cracked, out of balance, or partially missing, replace it.		
	Loose set screw	Tighten it.		
	Worn bearings	If knocking sounds continue when running or loose, replace the motor. If 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 discon- nected, 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	Check for continuity, refer to the wiring diagram for terminal identification. Replace the switch if the circuit is open.		
	Thermistor	Check the TEMP control. If not at the lowest number, set TEMP control to this setting and restart the unit.		
		Check the continuity of the thermistor. Replace the thermistor 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 mis ing, correct. If the blower or fan is hitting scrol 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.	
Auto air-swing fails.	Wiring	Check terminals. If loose, repair or replace.	
	Synchronous motor.	Check the synchronous motor for open circuit.	

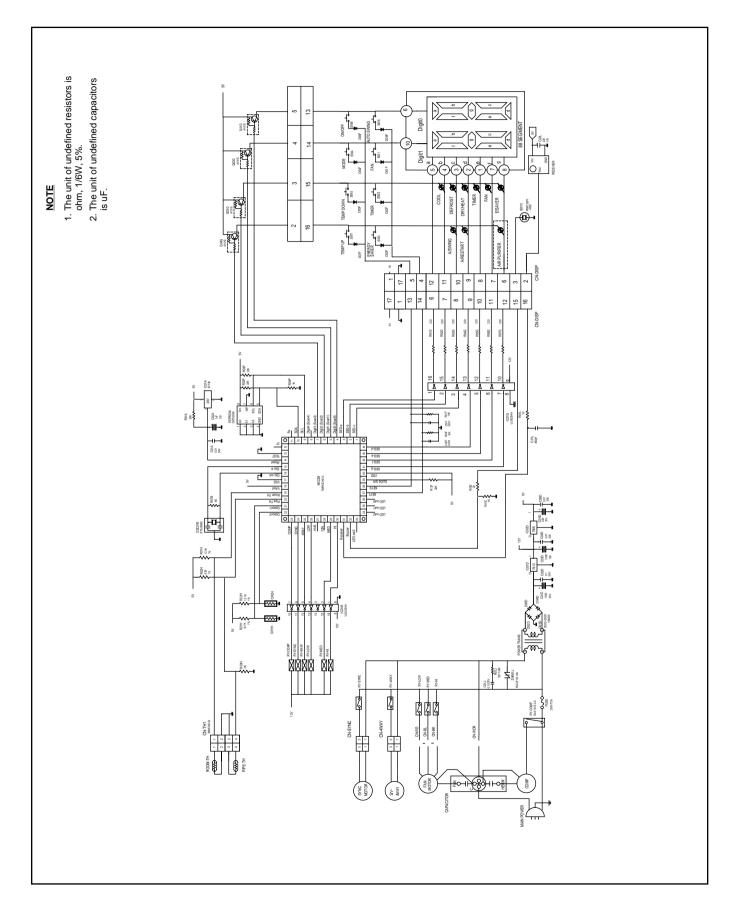
## 5.1 CIRCUIT DIAGRAM

#### LW-136

LWM1430TAS



NO.	DESCRIPTION
1	POWER CORD
2	FAN MOTOR
3	CAPACITOR
4	COMPRESSOR
5	MAIN PWB ASSEMBLY
6	DISPLAY PWB ASSEMBLY
7	THERMISTOR ASSEMBLY
8	CONNECTOR
9	FUSE



#### **5.2. ELECTOINC CONTROL DEVICE**

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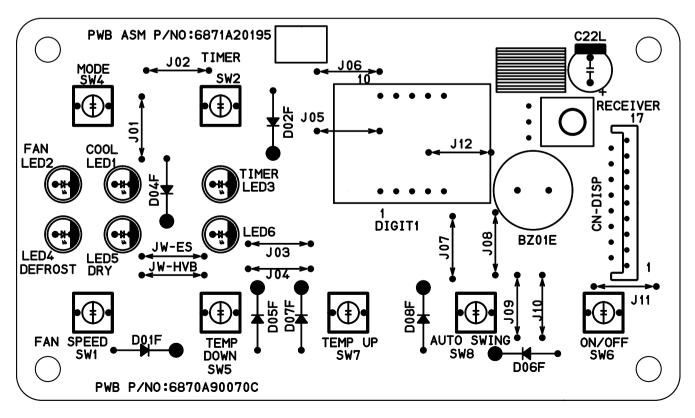
#### 5.3. COMPONENTS LOCATION (FOR MAIN P.C.B ASM)

#### <u>CN-10N</u> CN-12V 1000 Ο Ο С IC01A O CN-RI 0 **€ 102** 0 O CN-RD -6-6 20F 0 (1)-61 O CN-BL đ B CN-BK CN-RI 0 0 0 0 PWB ASS'Y: 6871A20188 PWB ASS'Y: 6871A10070 ASS'Y: 6871A20196 N-SYN ž 0 0 0 0 0 0 0 0 7 CN-DISP 0 0 0 0 0 0 0 0 0 0 o **← 101 →** o 0 0 PWB P/NO: 6870A90069A PWB P/NO: 6870A90069B ð 510-6134 RY-5 0 0 RY-4 o <del>\_aa</del>⇒ o 0 Ó 0 С 0 0 Q i kiti l BB 250V/2A CN °**-11**--∘ 0 0 о 0 0 CN-4WAY )ĝ °**∔**~° 0 0 0 Ĭ, O 25 W CN-WO 0 起 0 0 000 PONER TRANS 0 0 0 0 0

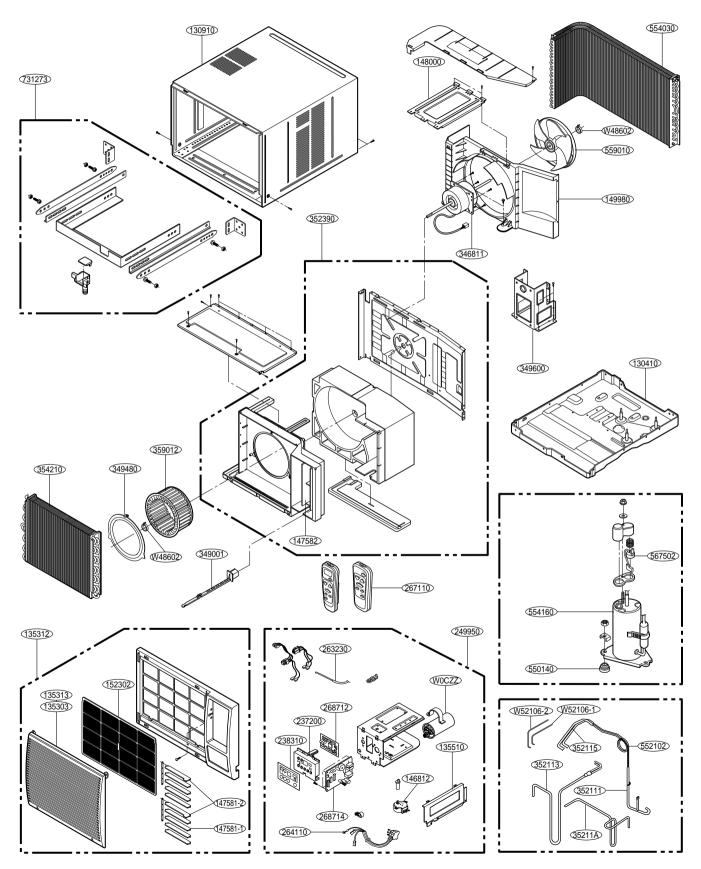
#### LWM1430TAS

LW-136

#### 5.4. COMPONENTS LOCATION (FOR DISPLAY P.C.B ASM)



### 6. EXPLODED VIEW



### 7. REPLACEMENT PARTS LIST

R: Service Parts

LOCATION NO.	DECODICTION	PAR		
	DESCRIPTION	LW-136	LWM1430TAS	REMARK
130410	BASE ASSEMBLY, SINGLE	3041A30002B	3041A30002B	R
130910	CABINET ASSEMBLY, SINGLE	3091AR6057B	3091AR6057B	R
135312	GRILLE ASSEMBLY, FRONT(SINGLE)	3531A20073C	3531A20073C	R
135313	GRILLE, INLET	3530A10070A	3530A10070A	R
135500	COVER, TERMINAL	3550U-L004A	3550U-L004A	R
135510	COVER ASSEMBLY, CONTROL(SINGLE)	3551A30015A	3551A30015A	R
146812	MOTOR ASSEMBLY, SYNC.	2H01102A	2H01102A	R
147581-1	LOUVER, HORIZONTAL	4758AR7264A	4758AR7264A	R
147581-2	LOUVER, HORIZONTAL	4758AR7278A	4758AR7278A	R
148000	BRACE	4800AR7272A	4800AR7272A	R
149980	SHROUD	4998AR1597A	4998AR1597A	R
152302	FILTER ASSY, A/C	5231AR6159A	5231AR6159A	R
237200	PANEL, CONTROL	3720AR6163A	3720AR6163B	R
238310	ESCUTCHEON	3831A20060A	3831A20032Z	R
249950	CONTROL BOX ASSEMBLY, SINGLE	4995A20254J	4995A20045S	R
263230	THERMISTOR ASSEMBLY	6323A20003D	6323A20003D	R
264110	POWER CORD ASSEMBLY	6410A20007B	3H03671A	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20052G	6711A20052B	R
268712	PWB(PCB) ASSEMBLY, DISPLAY	6871A20195C	6871A20195B	R
268714	PWB(PCB) ASSEMBLY, MAIN(AC)	6871A20188A	6871A20196E	R
346811	MOTOR ASSEMBLY, SINGLE	4681AR6033K	4681AR6033K	R
349001	DAMPER, VENTILATION	4900AR7265A	4900AR7265A	R
349480	ORIFICE	4948A30006A	4948A30006A	R
349600	MOUNT, MOTOR	4960AR1596A	4960AR1596A	R
352111	TUBE ASSEMBLY, CONNECTOR	5211AR7059A	5211AR7059A	R
352113	TUBE ASSEMBLY, DISCHARGE SINGLE	5211A30066S	5211A30066S	R
35211A	TUBE ASSEMBLY, SUCTION SINGLE	5211A30088G	5211A30088G	R
352390	AIR GUIDE ASSEMBLY	5239A20001J	5239A20001J	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421A20009E	5421A20009E	R
359012	FAN ASSEMBLY, BLOWER	5834AR1599A	5834AR1599A	R
550140	ISOLATOR, COMP	4H00982C	4H00982C	R
552101	TUBE, CAPILLARY	5424AR3411X	5424AR3411X	R
554031	CONDENSER ASSEMBLY, BENT	5403A20004K	5403A20004K	R
554160	COMPRESSOR SET	2520UKRK2BA	2520UKRK2BA	R
559010	FAN ASSEMBLY, AXIAL	5900AR1508A	5900AR1508A	R
731273	INSTALL PART ASSEMBLY, SET	3127AR3523F	3127AR3523F	R
W0CZZ	CAPACITOR, DRAWING	6120AR2194D	6120AR2194D	R
W48602	CLAMP, SPRING	3H02932C	3H02932C	R

NOTE) \*Please ensure GCSC since these parts may be changed depending upon the buyer's request. (GCSC WEBSITE http://biz.LGservice.com)



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