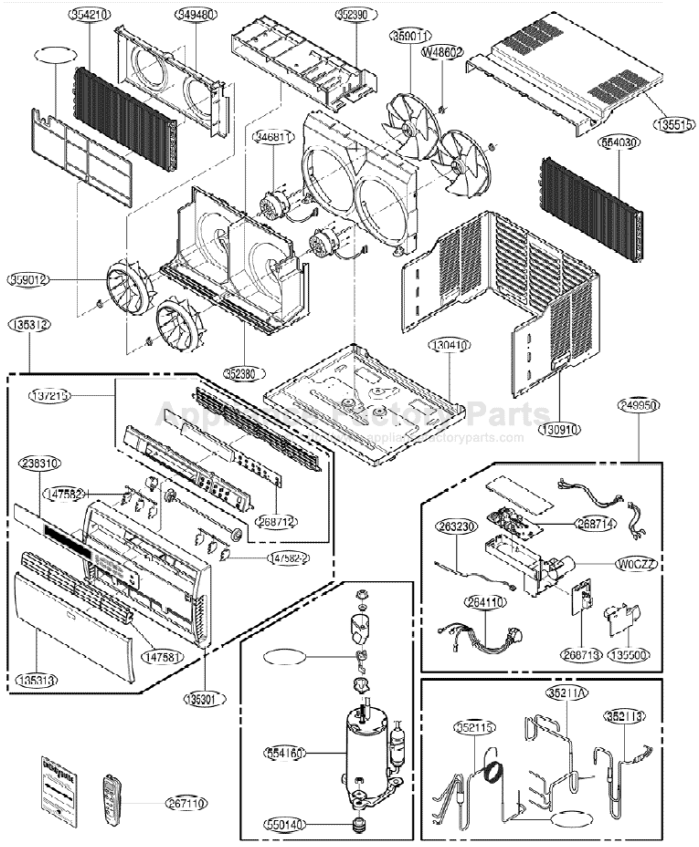
LG LA1000PR
Owner's Manual



-------- Manual continues below --------

WEBSITE http://biz.LGservice.com

Room Air Conditioner

SERVICE MANUAL

CAUTION

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

MODEL: LA1000PR

TABLE OF CONTENTS

Safety Precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

■ Incorrect operation due to ignoring instructions will cause harm or damage. The seriousness is classified by the following indications.

■ Because of the weight of the product, it is recommended that you have a helper to assist in the installation.

⚠WARNING	This symbol indicates the possibility of death or serious injury.
⚠CAUTION	This symbol indicates the possibility of injury or damage to properties only.

■ Meanings of symbols used in this manual are as shown below.

⊘	**Be sure not to do.**
❗	**Be sure to follow the instruction.**

⚠WARNING

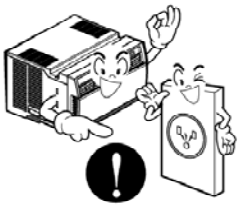
■ Installation

Don't use a power cord, a plug or a loose socket which is damaged.

• Otherwise, it may cause a fire or electrical shock.

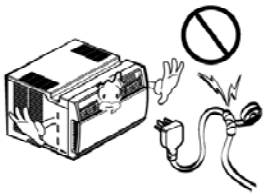
Always plug into a grounded outlet.

• Otherwise, it may cause a fire or electrical shock.



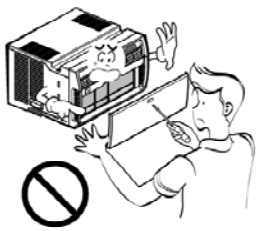
Do not modify or extend the power cord length.

• It will cause electric shock or fire due to heat generation.



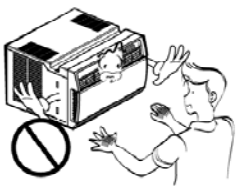
Do not disassemble or modify products.

• It may cause failure and electric shock.



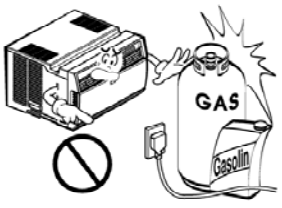
Be caution when unpacking and installing.

• Sharp edges may cause injury.



Do not use the power cord near flammable gas or combustibles such as gasoline, benzene, thinner, etc.

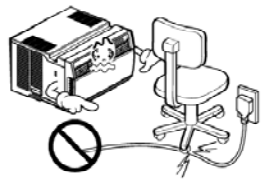
• It may cause explosion or fire.



■ Operation

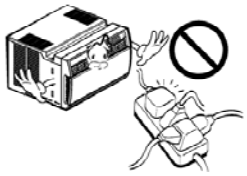
Do not place heavy object on the power cord and take care so that the cord should not be pressed.

• There is danger of fire or electric shock.



Do not share the outlet with other appliances.

• It will cause electric shock or fire due to heat generation.

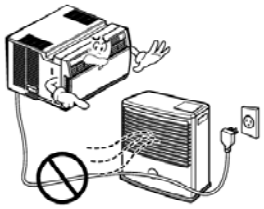


Take the power plug out if necessary, holding the head of the plug and do not touch it with wet hands.

• Otherwise, it may cause a fire or electrical shock.

Do not place the power cord near a heater.

• It may cause fire and electric shock.



Do not allow water to run into electric parts.

• It will cause failure of machine or electric shock.

Use a soft cloth to clean. Do not use wax, thinner, or a strong detergent.

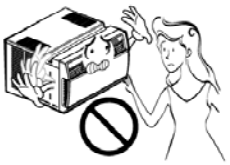
• The appearance of the air conditioner may deteriorate, change color, or develop surface flaws.

Unplug the unit if strange sounds, odors, or smoke come from it.

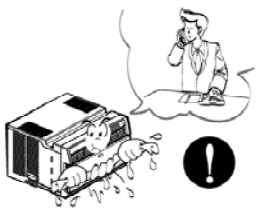
• Otherwise it may cause fire and electric shock accident.

Do not open the suction inlet grill of the product during operation.

• Otherwise, it may electrical shock and failure.

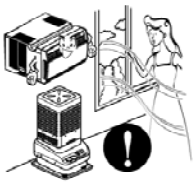


If water enters the product, turn off the the power switch of the main body of appliance. Contact service center after taking the power-plug out from the socket.



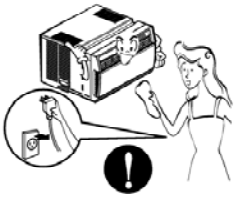
Ventilate the room well when using this appliance together with a stove, etc.

• An oxygen shortage may occur.



Turn off the power and breaker firstly when cleansing the unit.

• Since the fan rotates at high speed during operation, it may cause injury.



Turn off the main power switch when not using it for a long time.

• Prevent accidental startup and the possibility of injury.

Do not operate or stop the unit by inserting or pulling out the power plug.

• It will cause electric shock or fire due to heat generation.

Do not damage or use an unspecified power cord.

• It will cause electric shock or fire.

Do not operate with wet hands or in damp environment.

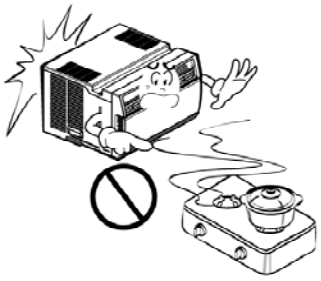
• It will cause electric shock.

Hold the plug by the head when taking it out.

• It may cause electric shock and damage.

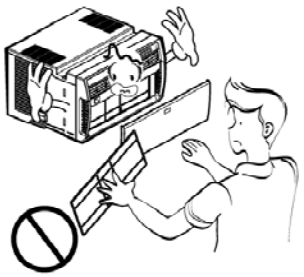
When gas leaks, open the window for ventilation before operating the unit.

• Otherwise, it may cause explosion, and a fire.



Never touch the metal parts of the unit when removing the filter.

• They are sharp and may cause injury.

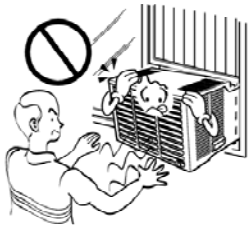


⚠CAUTION

■ Installation

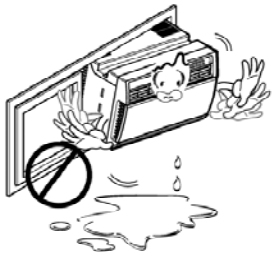
Install the product so that the noise or hot wind from the outdoor unit may not cause any damage to the neighbors.

• Otherwise, it may cause dispute with the neighbors.



Keep level parallel in installing the product.

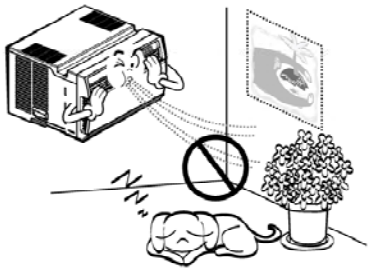
• Otherwise, it may cause vibration or water leakage.



■ Operation

Do not put a pet or house plant where it will be exposed to direct air flow.

• It may cause injury.

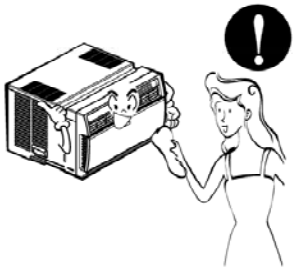


Do not block the inlet or outlet of air flow.

• It may cause product failure.

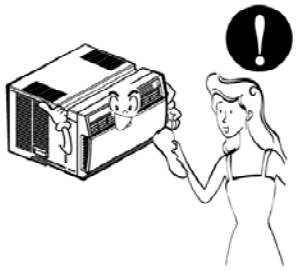
Use a soft cloth to clean. Do not use wax, thinner, or a strong detergent.

• The appearance of the air conditioner may deteriorate, change color, or develop surface flaws.



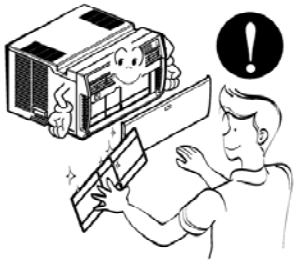
Do not step on the indoor/outdoor unit and do not put anything on it.

• It may cause an injury through dropping of the unit or falling down.



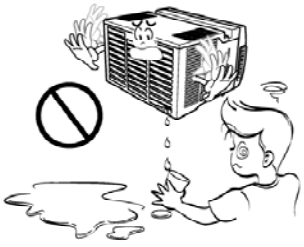
Always insert the filter securely. Clean it every two weeks.

• Operation without filters will cause failure.



Do not drink water drained from air conditioner.

• It contains containments and will make you sick.

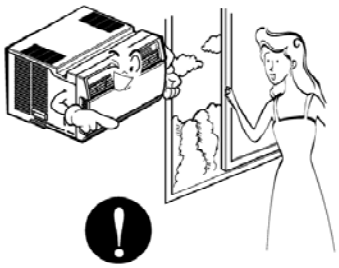


Be cautious not to touch the sharp edges when installing.

• It may cause injury.

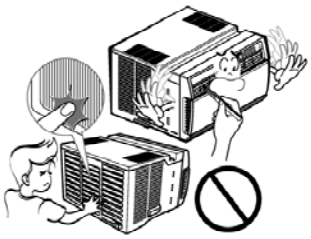
Avoid excessive cooling and perform ventilation sometimes.

• Otherwise, it may do harm to your health.



Do not insert the hands or bars through the air inlet or outlet during operation.

• Otherwise, it may cause personal injury.



Dimensions

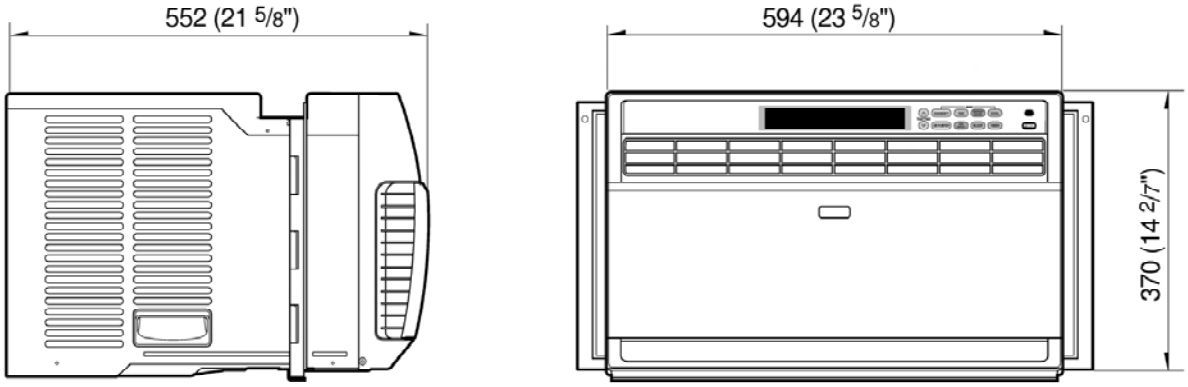
Symbols Used in this Manual

This symbol alerts you to the risk of electric shock.

This symbol alerts you to hazards that could cause harm to the air conditioner.

NOTICE **This symbol indicates special notes.**

Outside Dimensions

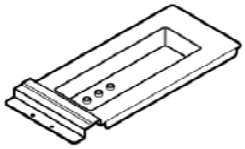
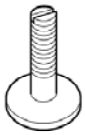
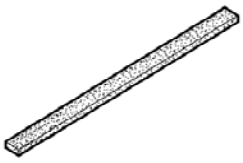
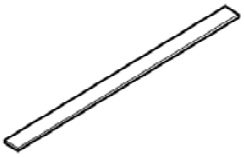


Product Specifications

ITEMS \ MODELS			LA1000PR
POWER SUPPLY			1Ø, 115V, 60Hz
COOLING CAPACITY		(BTU/H)	10,000
INPUT		(W)	920
RUNNING CURRENT		(A)	8.4
E.E.R		(BTU/W.H)	10.8
OPERATING CONDITION	INDOOR (℃)		26.7(OD) 19.4(WB)
	OUTDOOR (℃)		35.0(DB) 23.9(WB)
REFRIGERANT (R-22) CHARGE			480g (16.9oz)
EVAPORATOR			Ø7, 3ROW, 11STACKS
CONDENSER			Ø7, 2ROW, 17STACKS
FAN, INDOOR			TURBO FAN 2EA
FAN, OUTDOOR			PROPELLER TYPE FAN WITH SLINGER RING 2EA
FAN SPEEDS, FAN/COOLING			3/3
FAN MOTOR			6POLES
OPERATION CONTROL			REMOTE CONTROLLER
ROOM TEMP. CONTROL			THERMISTOR
AIR DIRECTION CONTROL			VERTICAL LOUVER(RIGHT & LEFT)
			HORIZONTAL LOUVER(UP & DOWN)
CONSTRUCTION			TOP DOWN
PROTECTOR	COMPRESSOR		OVERLOAD THERMAL PROTECTOR
	FAN MOTOR		INTERNAL THERMAL PROTECTOR
POWER CORD			3 WIRE WITH GROUNDING
			ATTACHMENT PLUG (CORD-CONNECTED TYPE)
DRAIN SYSTEM			DRAIN PIPE OR SPLASHED BY FAN SLINGER
NET WEIGHT		(lbs/kg)	17.2(38)
OUTSIDE DIMENSION		(inch)	23 5/8 14 2/7 21 5/8
(W x H x D)		(mm)	594 x 370 x 552

* DB:Dry Bulb
** WB:Wet Bulb

Installation

ITEM A: 1EA SUPPORT, BRACKET	ITEM B: 1EA LEVELING BOLT	ITEM C: 1EA LEVELING BOLT	ITEM D: 2EA SCREW: 5/8"	ITEM E: 7EA SCREW: 5/8"
				
ITEM F: 1EA FOAM SEAL	**ITEM G: 1EA FOAM STRIP**	**ITEM H: 1EA L BRACKET**	**ITEM J: 1EA SIDE BRACKET**	**ITEM K: 1EA DRAIN PIPE**
				

Have the following tools available for installation:

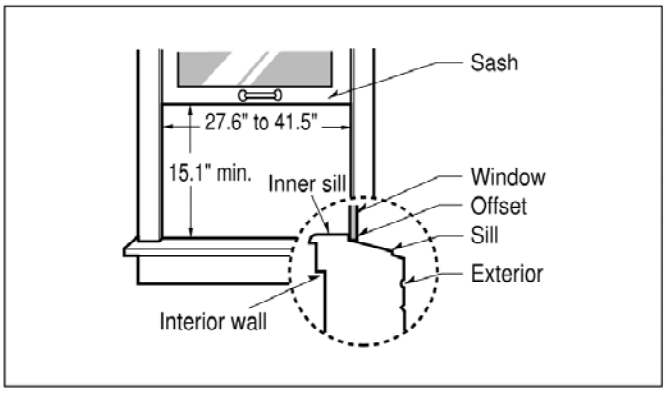
- Tight Fitting gloves
- Standard screwdriver
- Phillips screwdriver
- Pliers
- Sharp knife
- 3/8-inch open end wrench or adjustable wrench
- 1/4-inch hex socket and ratchet
- Tape measure
- Electric drill
- 1/4-inch drill bit

Window Requirements

Size

Your air conditioner will install into standard double hung windows with actual clear opening widths of 27.6 to 41.5 inches (700mm to 1054mm).

Lower sash must open sufficiently to allow a clear vertical opening of 15.1 inches (383mm). Side louvers and the rear of the air conditioner must have clear air space to allow enough airflow through the condenser for heat removal. The rear of the unit must be outdoors, not inside a building or garage.



WARNING: This product is a WINDOW AIR CONDITIONER.
As such, a standard single-hung or double-hung window is required for proper installation. Non-window installations, including using sleeves, holes in walls, and other installations are not recommended.

Preparation of chassis

CAUTION: To avoid the possibiity of personal injury, unplug power to unit before installing or servicing.

Pick a location which will allow you to blow the cold air into the area you want. Windows used for installation must be strong enough to support the weight of the air conditioner. Good installation with special attention to the proper position of the unit will lessen the chance that service will be needed.

When cooling more than one room, installation location is very important. To cool your rooms, cold air must be blown from the air conditioner in a straight path.

How to Install

If the air conditioner is blocked by a storm window frame, see step 11 on page 12 before beginning to install.

1. Cut the FOAM STRIP (ITEM G) to fit the underside of the window sash. Open the window, peel off the FOAM STRIP backing and attach the FOAM STRIP as shown in FIG. 1.

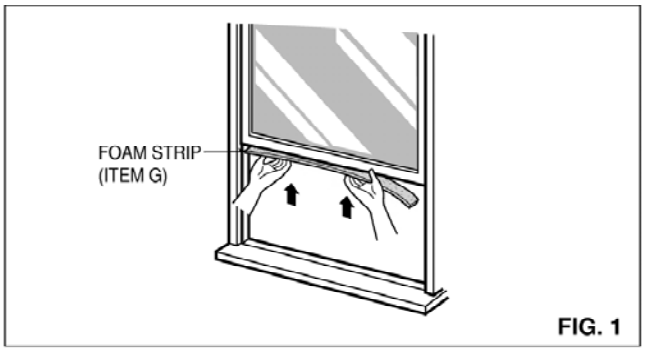


FIG. 1

2. Mark center line with pencil on the center of the inner sill, as shown in FIG. 2.

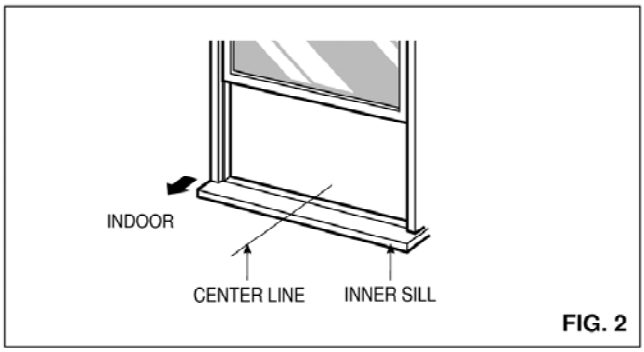


FIG. 2

3. Install support bracket on window. See FIG. 3.
   Install leveling bolt up through bottom side of support bracket. You can choose a short bolt (ITEM C) or a long one (ITEM B) according to window type. Also, you should select the position of hole on bracket.
   Position bracket on sill on the center line of window (See FIG. 3).
   Fasten bracket loosely to sill with screws (ITEM D) provided.
   Adjust leveling bolt so that the air conditioner will be installed with a very slight tilt (about 1/4") downward toward the outside for proper drainage. Tighten bracket screws.

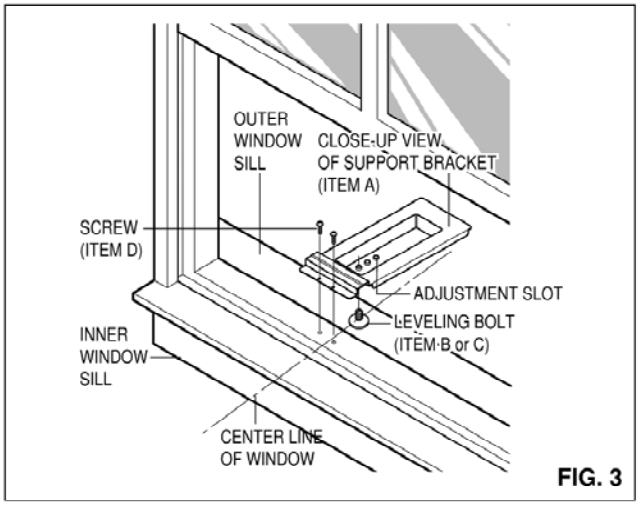


FIG. 3

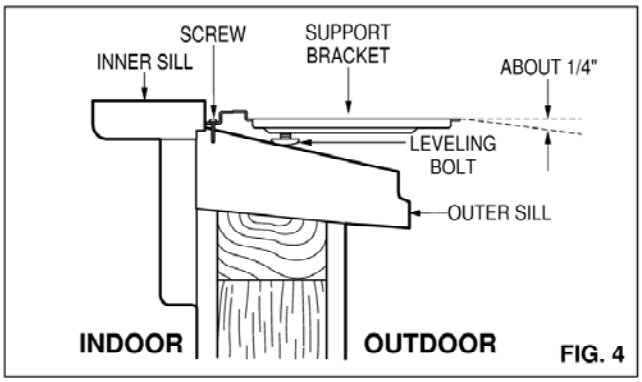


FIG. 4

CAUTION: During the following step, hold unit firmly until window sash is lowered to top channel behind curtain frames. Personal injury or property damage may result if unit falls from window.

Unit Installation

Caution: During the following step, hold unit firmly until window sash is lowered to top channel behind side panel frames. Personal injury or property damage may result if unit falls from window.

1. INSTALL THE AIR CONDITIONER IN THE WINDOW
   - Carefully lift the air conditioner and slide it into the open window. Be careful not to hurt waist in this operation.
   - Use the two hand grips on bottom sides of unit to lift unit.

NOTICE : Hold unit firmly and push outward to correct bracket location. You will feel unit drop securely in place on the support bracket.

- Lower top window sash all the way down so that sash sits firmly in top channel of unit and expandable curtain frames.

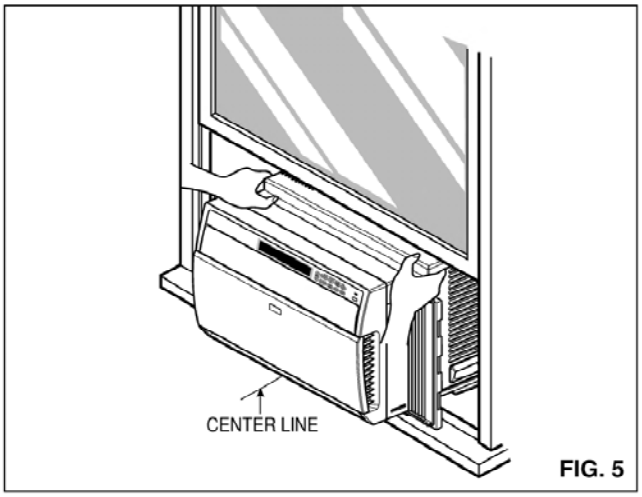


FIG. 5

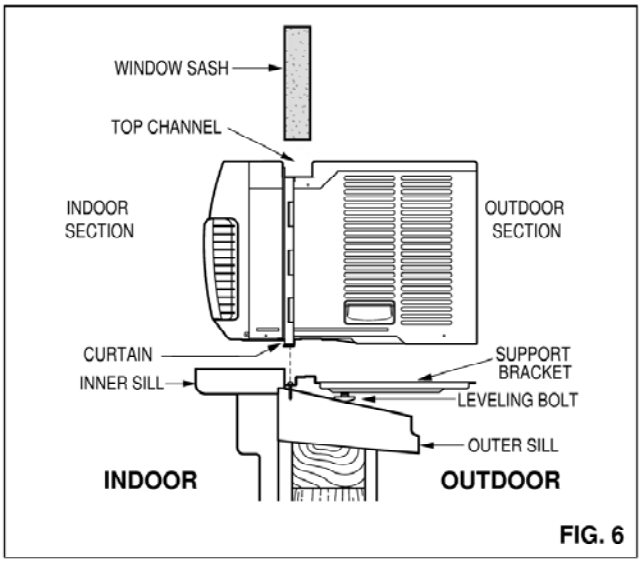


FIG. 6

2. SECURE THE curtain frames Expand the curtain frames and secure them using 4 screws (ITEM E) as shown in FIG. 7. When curtain frame opens or closes, you may feel a slight resistance. This is normal.
3. Foam seal and window lock
   - Cut the foam seal (ITEM F) to the window width. Stuff the foam seal between the glass and the window to prevent air and insects from getting into the room, as shown in FIG. 7.
   - Install the L bracket to prevent window from being raised which may result in unit falling.
   - Attach the side bracket (ITEM J) in the inner window sill with a screw (ITEM E), as shown in FIG. 8, after removing the existing screw at right bottom side on cabinet.

NOTICE : If window sash has a metal surface, use sheet metal screws instead of the provided wood screws. Obtain sheet metal screws at local hardware store.

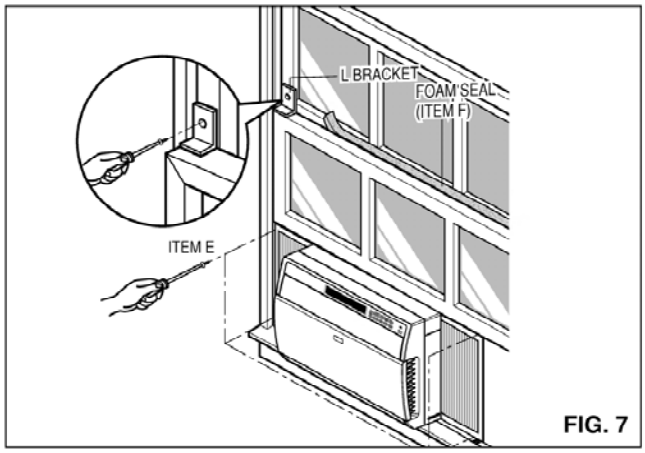


FIG. 7

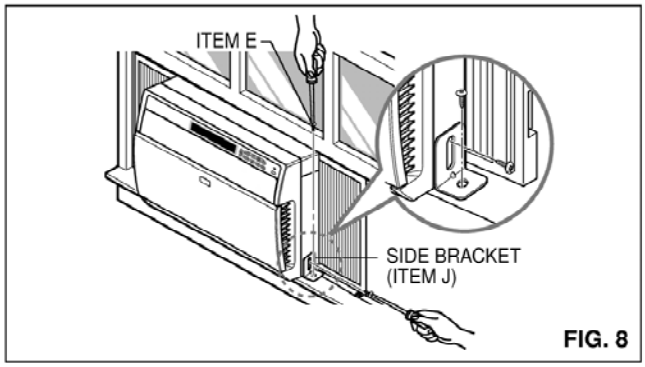
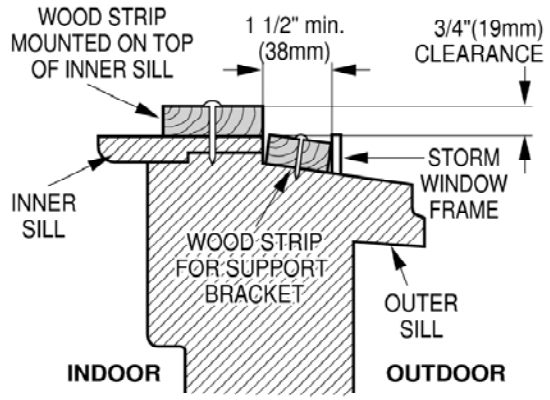


FIG. 8

CAUTION: Failure to securely install support bracket may result in unit falling from window if window sash is raised after unit is installed. This could result in personal injury.

4. If AIR CONDITIONER is Blocked by Storm Window FRAME
   - If storm window presents interference, fasten a 2" wide wood strip to the inner window sill across the full width of the sill. The wood strip should be thick enough to raise the height of the window sill so that the unit can be installed without interference from the the storm window frame. See FIG. 9.
     Top of wood strip should be approximately 3/4" higher than the storm window frame to help condensation to drain properly to the outside.
   - Install a second wood strip (approximately 6" long by 11/2" wide and same thickness as first strip) in the center of the outer sill flush against the back of the inner sill.



When storm window frame is located on outer sill

FIG. 9

REMOVAL FROM WINDOW

- Turn off and unplug the air conditioner.
- Unscrew the side screws that you installed in Step 2(Page 11).
- Close the curtain frame and remove foam seal and L bracket from the windows.
- Keep a firm grip on the air conditioner and raise the sash.
- Lift the air conditioner from the window.
- Remove the foam strip from between the window.
- Remove the support bracket from window frame.
- Place unit and mounting hardware in air conditioner shipping carton, and store in clean, dry place.

⚠ CAUTION:

- Air conditioners covered in this manual pose an excessive weight hazard. Two or more people are needed to move and install the unit.
  To prevent injury or strain, use proper lifting and carrying techniques when moving unit.
- When handling the air conditioner, be careful to avoid cuts from sharp metal fins on front and rear coils.
- Make sure air conditioner does not fall during removal.

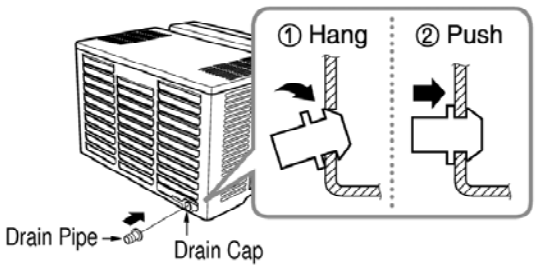


FIG. 10

Operation

Remote Control Operation

CAUTION: If you turn off the air conditioner or switch from cooling to the fan, wait at least 3 minutes before setting to cooling again.

CONTROL PANEL DISPLAY

TEMPERATURE/TIME CONTROL
- The thermostat monitors room temperature to maintain the desired temperature. The thermostat can be set between 60°F~86°F (16°C~30°C).
- This button also controls the timer setting in TIMER mode. The timer can be set up to 24 hours.

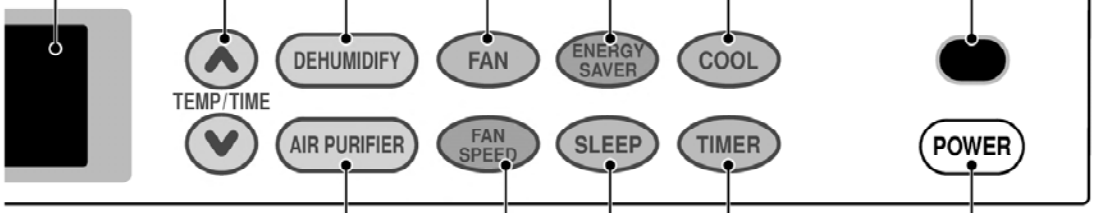
DEHUMIDIFY
- Press this button for Dehumidify Function.
- Dehumidify Function Allows for moisture removal without decreasing room temperature.

FAN
Press this button for basic ventilating fan operation.

ENERGY SAVER
The fan stops when the compressor stops cooling. Approximately every 3 minutes the fan will turn on and check the room air to determine if cooling is needed.

COOL
Press this button for cooling operation.

REMOTE CONTROL SIGNAL RECEIVER



AIR PURIFIER
- Press the AIR PURIFIER button. Operation will start when the button is pressed and stop when the button is pressed again.
- You can select the fan speed in three settings: High, Low or Medium. Each time the button is pressed, the fan speed mode is shifted.
- If you press only the AIR PURIFIER button, only air purifying operates without cooling. You can select the fan speed in three settings: High, Low or Medium. Each time the fan speed button is pressed, the fan speed mode is shifted.

FAN SPEED
For increased power while cooling, select a higher fan speed.
3 steps: High → Low → Medium → High ...

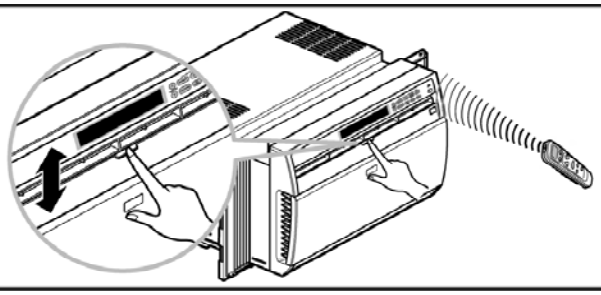
POWER
Operation starts when this button is pressed and stops when you press the button again.
- AUTO RESTART
  In the event of a power failure, the unit will run at the previous setting once power returns.

TIMER
- SHUT-OFF TIME
- You will usually use shut-off time while you sleep.
- If unit is running, use Timer to set number of hours until shut-off.
- You can control your timer setting up and down with TEMP/TIME button.
- START TIME
- If unit is off, use Timer to set number of hours before unit starts.
- You can control your timer setting up and down with TEMP/TIME button.

SLEEP
- Press the sleep mode button to set the time you want the unit to turn off automatically.
- Press this button to increase the hours until shut off from 1 through 7 hours.
- For your sleeping comfort, once Time is set, the Temperature setting will raise 2˚F after 30 min., and 2°F after another 30 min.

Opening the Panel Door

You can open and shut the Panel Door both by your fingertips and by Remote Control.



POWER
• To turn the air conditioner ON, push the button. To turn the air conditioner OFF, push the button again.
This button takes priority over any other button.
When you first turn it on, the air conditioner is on the High cool mode and the Temp. at 72°F

AIR PURIFIER
• Press the Air Purifier button.
Operation will start when the button is pressed and stop when the button is pressed again.
• You can select the fan speed in three settings: High, Low or Medium.
Each time the button is pressed, the fan speed mode is shifted.
• If you press only the Air Purifier button, only air purifying operates without cooling.
You can select the fan speed in three settings: High, Low or Medium.
Each time the fan speed button is pressed, the fan speed mode is shifted.

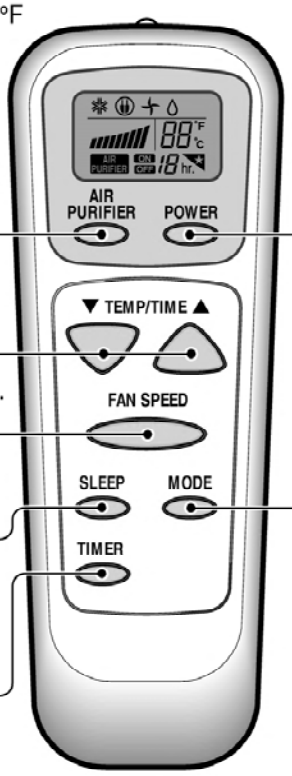
TEMPERATURE/TIME CONTROL
• The thermostat monitors room temperature to maintain the desired temperature.
The thermostat can be set between 60°F~86°F (16°C~30°C).
• This button also controls the timer setting in TIMER mode. The timer can be set up to 24 hours.

FAN SPEED
• For increased power while cooling, select a higher fan speed.
3 steps: High → Low → Medium → High ...

SLEEP
• Press the sleep mode button to set the time you want the unit to turn off automatically.
• Press this button to increase the hours until shut off from 1 through 7 hours.
• For your sleeping comfort, once Time is set, the Temperature setting will raise 2˚F after 30 min., and 2°F after another 30 min.

TIMER
- SHUT-OFF TIME
• You will usally use shut-off time while you sleep.
• If unit is running, use Timer to set number of hours until shut-off.
• You can control your timer setting up and down with TEMP/TIME button.

- START TIME
• If unit is off, use Timer to set number of hours before unit starts.
• You can control your timer setting up and down with TEMP/TIME button.

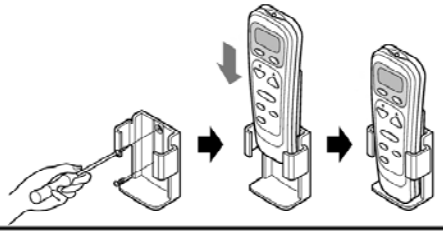


MODE
- Push this botton to shift MODE of operation from COOL → ENERGY SAVER → FAN → DEHUMIDIFY.
- ENERGY SAVER
• The fan stops when the compressor stops cooling.
Approximately every 3 minutes the fan will turn on and check the room air to determine if cooling is needed.

How to Insert Batteries into Remote Control

1. Remove the cover from the back of the remote control.
   • Open the cover according to the arrow direction on the cover.
2. Insert two batteries.
   • Be sure that the (+) and (-) directions are correct.
   • Be sure that both batteries are new.
3. Re-attach the cover.

• Do not use rechargeable batteries.
Such batteries differ from standard dry cells in shape, dimensions, and performance.
• Remove the batteries from the remote controller if the air conditioner is not going to be used for an extended length of time.
• You can put the remote control holder on the place of your preference with two screws enclosed in vinyl bag.



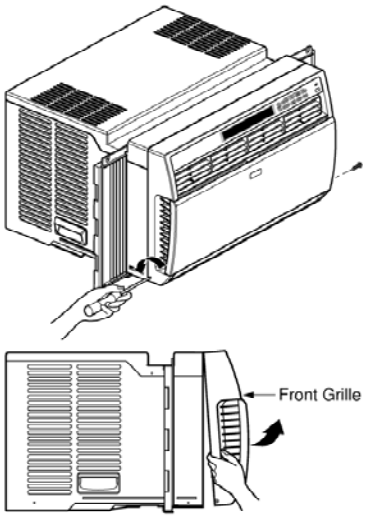
Disassembly

— Before the following disassembly, set the **CONTROL BOX** to **OFF** and disconnect the power cord.

Mechanical Parts

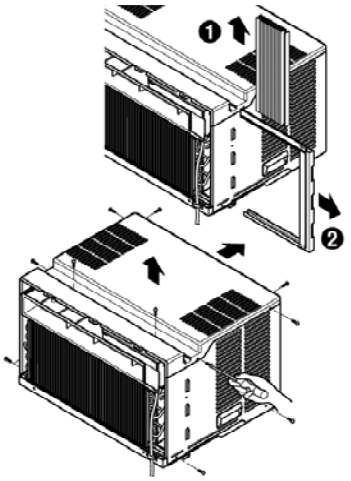
1. FRONT GRILLE

1. Disconnect the unit from source of power.
2. Using a screwdriver, remove 2 screws that secures the front grille to control board.
3. Push the grille up from the bottom and pull the top of the grille away from the case to lift the top tabs out of their slots.
4. Disconnect display connector.



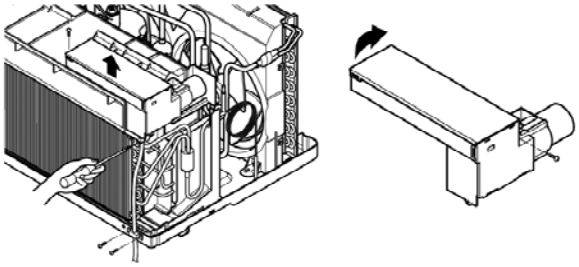
2. CABINET

1. Disconnect the unit from source of power.
2. Remove the front grille.
3. Push the window frame closest to the cabinet and pull the curtain upward.
4. Remove the window frame.
5. Remove all the screws securing cabinet and cabinet cover around the unit
6. Move the cabinet cover upward and remove it.
7. Pull the cabinet backward and remove it.



3. CONTROL BOARD

1. Disconnect the unit from the power source.
2. Remove the front grille.
3. Remove the cabinet.
4. Remove 2 screws securing the power cord.
5. Remove 2 screws securing the control box.
6. Pull the control box cover upward to open it.
7. Disconnect the inner wiring if necessary.
8. Remove the screw securing the side cover.

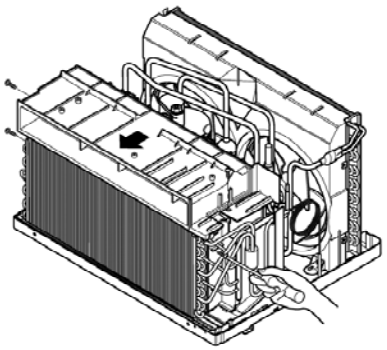


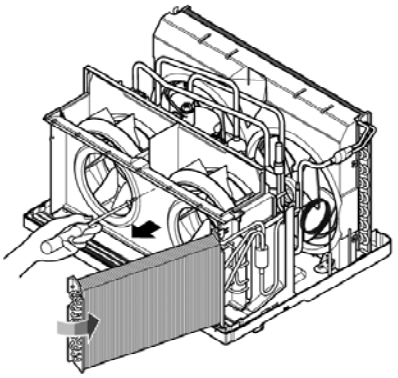
NOTICE : Controls, wires, and capacitor are now accessible for servicing. Discharge the capacitor before servicing. See 3.Capacitor on page18 for procedures.

Air Handling Parts

1. UPPER AIR GUIDE AND ORIFICE

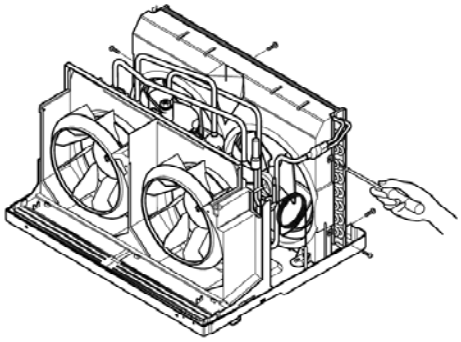
1. Remove 2 screws which fasten the upper air guide.
2. Pull the upper air guide forward and remove it.
3. Remove 2 screws which fasten the evaporator.
4. Move the evaporator coil forward and pull it upward slightly.
5. Rotate the evaporator counterclockwise slowly.
6. Remove the screw which fasten the orifice.
7. Remove the orifice.

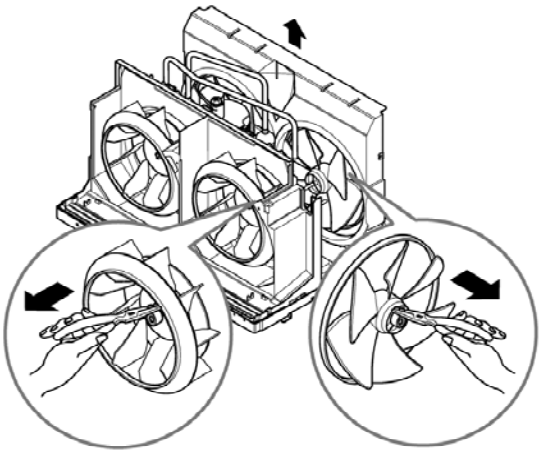




2.TURBO FAN, FAN AND SHROUD

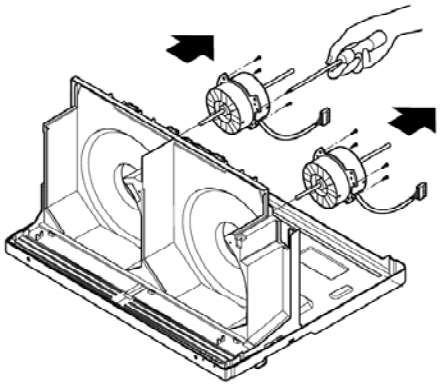
1. Remove upper air guide and orifice.
2. Remove the clamp at the turbo fan core with plier and pull the turbo fan out of air guide.
3. Remove 3 screws securing the shroud to channel of condenser.
4. Remove 2 screws securing the base pan to condenser.
5. Remove the clamp at the fan core with plier and pull the fan out of shroud.
6. Remove the shroud.





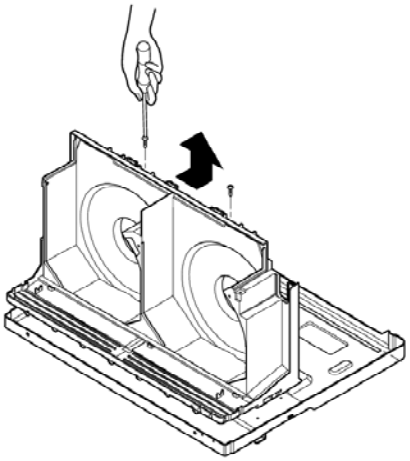
3. MOTOR

1.Remove upper air guide and orifice.
2.Remove turbo fan, fan and shroud.
3.Remove 2 screws the motor to the air guide.
4.Remove the motor.



4. AIR GUIDE

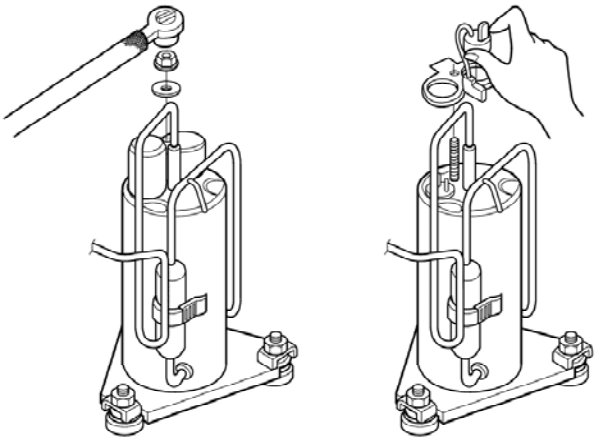
1.Remove upper air guide and orifice.
2.Remove turbo fan, fan and shroud.
3.Remove the motor.
4.Remove 2 screws that secure the air guide to the base pan.
5.Push the air guide backward and lift it upward.



Electrical Parts

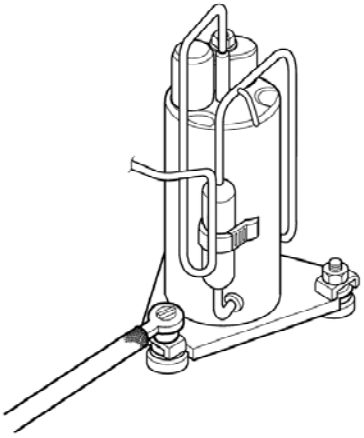
1 OVERLOAD PROTECTOR

1. Remove the front grille and cabinet.
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 removal procedure above.



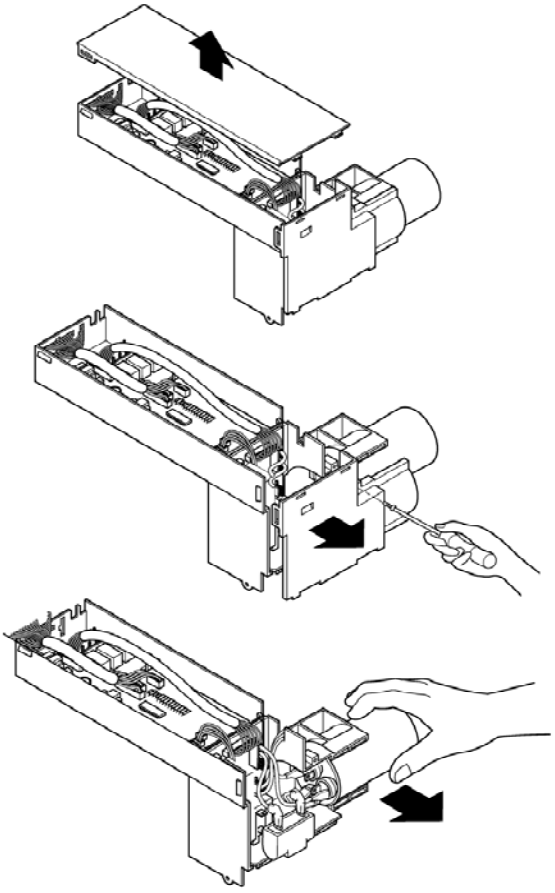
2. COMPRESSOR

1. Remove the front grille and cabinet.
2. Discharge the refrigerant by using a refrigerant recovery system.
3. Remove the overload protector.
4. After discharging the unit completely, unbrace the suction and discharge pipes at the compressor connections.
5. Remove 3 nuts which fasten the compressor.
6. Remove the compressor.
7. Re-install by referring to the removal procedure above.



3. CAPACITOR

1. Remove the cabinet.
2. Remove the top cover.
3. Remove the screw that secure the side cover to the control box.
4. Pick wires from the capacitor.
5. Open the side cover from the control box.
6. Pull out the capacitor from the control box.
7. Disconnect all the leads of capacitor terminals.
8. Re-install the components by referring to the removal procedure, above.

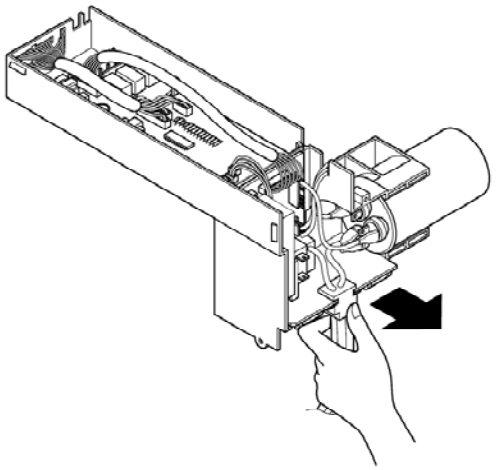


4. THERMOSTAT

1. Remove the cabinet.
2. Remove the control board.
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.

5. POWER CORD

1. Remove the control box.
2. Open the top cover from the control box.
3. Disconnect the front panel from the control box.
4. Disconnect two leads from the capacitor and relay.
5. Pull out the power cord.
6. Re-install the components by referring to the removal procedure, above.
7. 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 attached at the unit.



Refrigerating Cycle

CAUTION: 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.

1. CONDENSER

1. Remove the cabinet.
2. Discharge the refrigerant by using a refrigerant recovery system.
3. Remove 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 by referring to the procedures above.

2. EVAPORATOR

1. Remove the cabinet.
2. Discharge the refrigerant by using a refrigerant recovery system.
3. Remove the air guide upper.
4. After discharging the refrigerant completely, unbraze the interconnecting tube at the condenser connections.
5. Remove the evaporator.
6. Re-install by referring to the procedures above.

3. CAPILLARY TUBE

1. Remove the cabinet.
2. Discharge the refrigerant by using a refrigerant recovery system.
3. Remove the air guide upper.
4. After discharging the refrigerant completely, unbraze the interconnecting tube of the capillary tube.
5. Remove the capillary tube.
6. Re-install by referring to the procedures above.

NOTICE

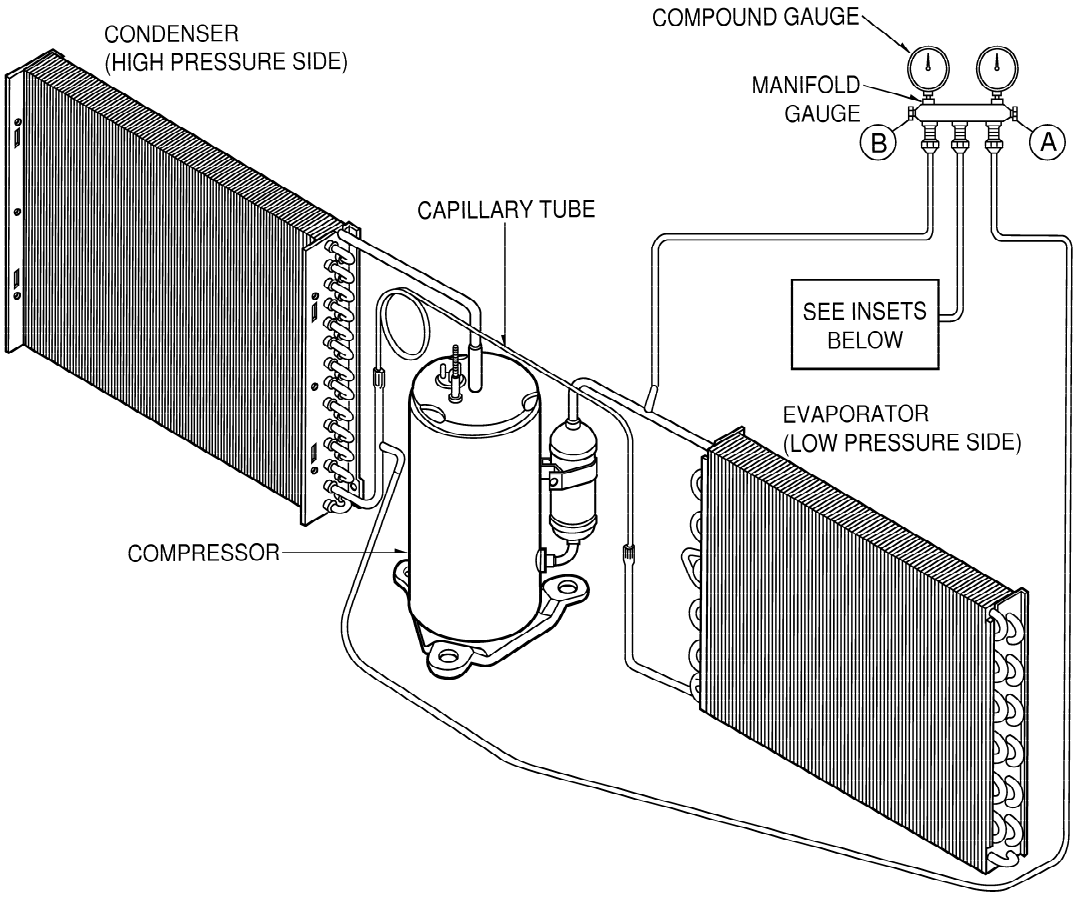
— Replacement of the refrigeration cycle.

1. When replacing the refrigeration cycle, be sure to 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 unbraze 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 Figure 11A.
   2) Start the vacuum pump, slowly open manifold valves A and B with two full turns counterclockwise 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 counterclockwise. This will keep oil from foaming and being drawn into the vacuum pump.

   3) Operate the vacuum pump vaccum for 20 to 30 minutes, until 600 microns of vaccum 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 Figure 11B. Open valve C.
      Discharge the line at the manifold connection.
   5) The system is now ready for final charging.
6. Recharge as follows :
   1) 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.
   2) Connect the charging cylinder as shown in Figure 11B. 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 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 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 braze and braze 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. Pin-off tool capable of making a vapor-proof seal, Leak detector, Tubing cutter, Hand Tools to remove components, Service valve.



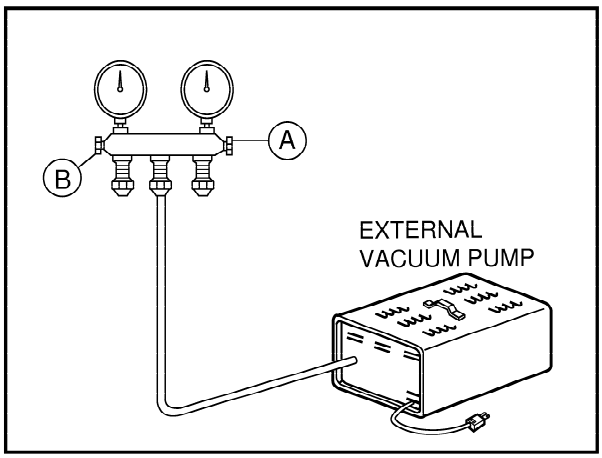


Figure 11A Pulling Vacuum

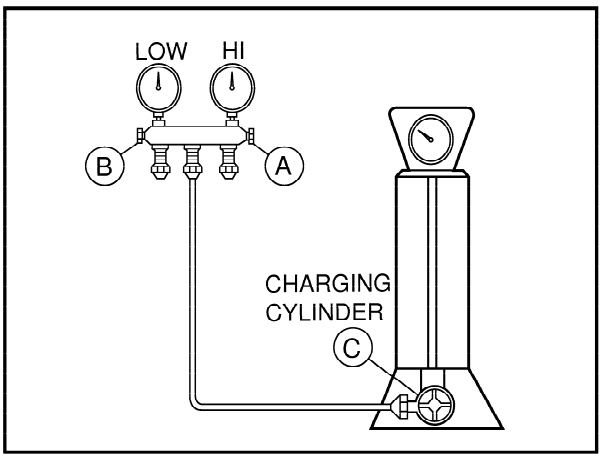
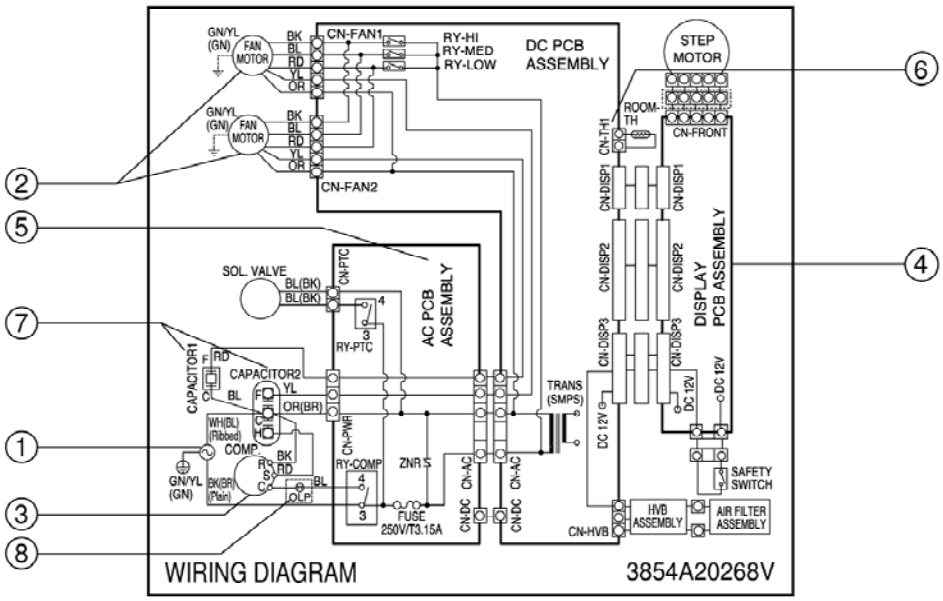


Figure 11B Charging

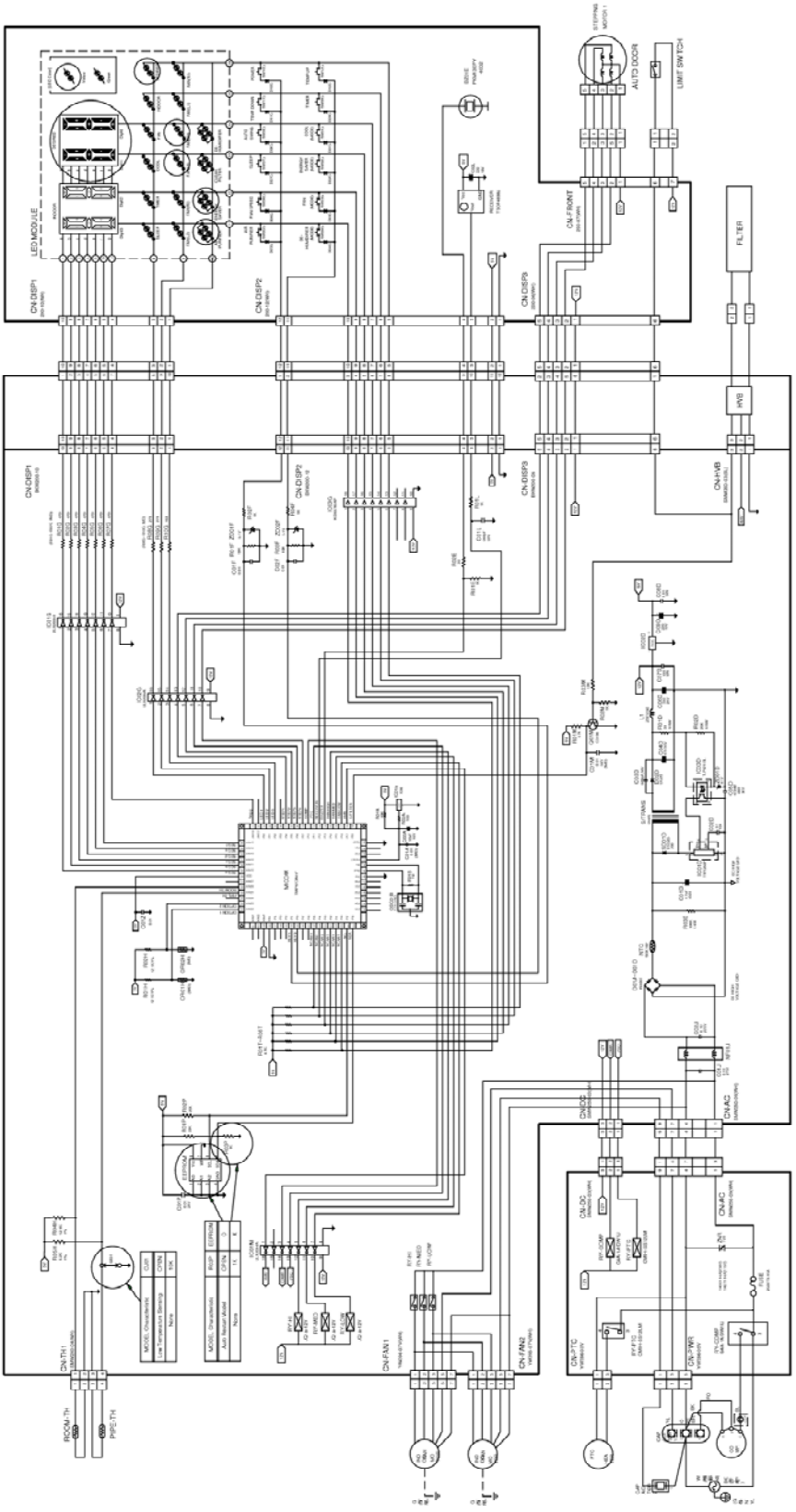
Schematic Diagram

Wiring Diagram

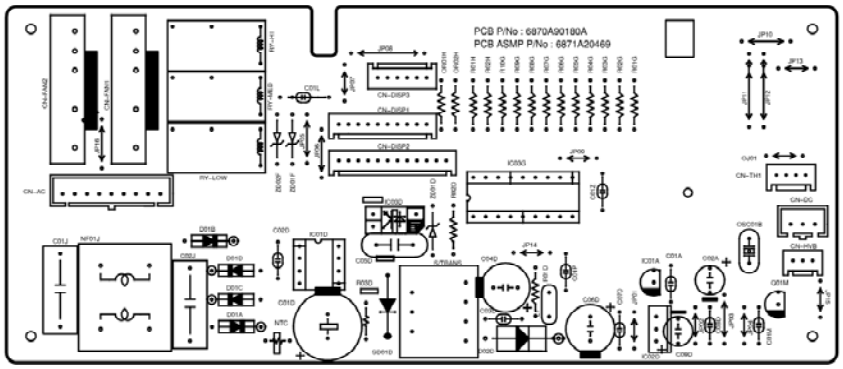


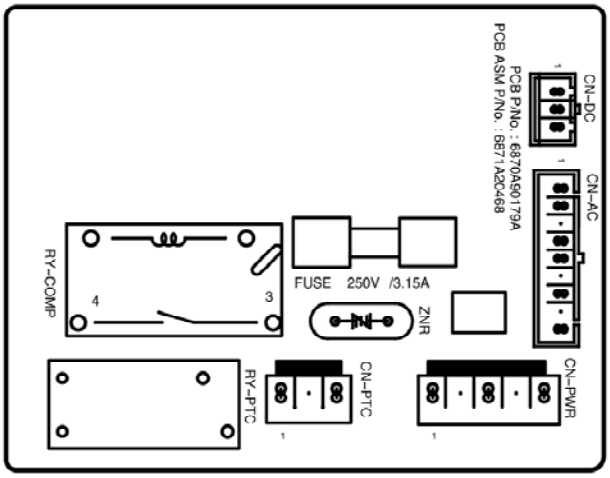
LOCATION NO.	DESCRIPTION	Q'TY PER SET
1	POWER CORD ASSEMBLY	1
2	FAN MOTOR	2
3	COMPRESSOR	1
4	DISPLAY P.W.B ASSEMBLY	1
5	MAIN P.W.B. ASSEMBLY	1
6	THERMISTOR	1
7	CAPACITOR	2
8	OVERLOAD PROTECTOR	1

Electronic Control Device

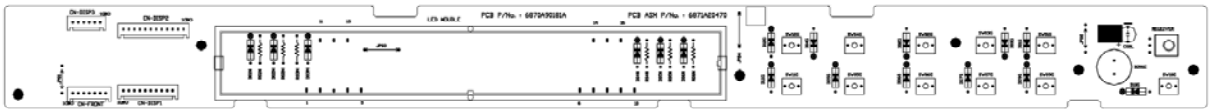


Components Location(For Main P.W.B ASM)



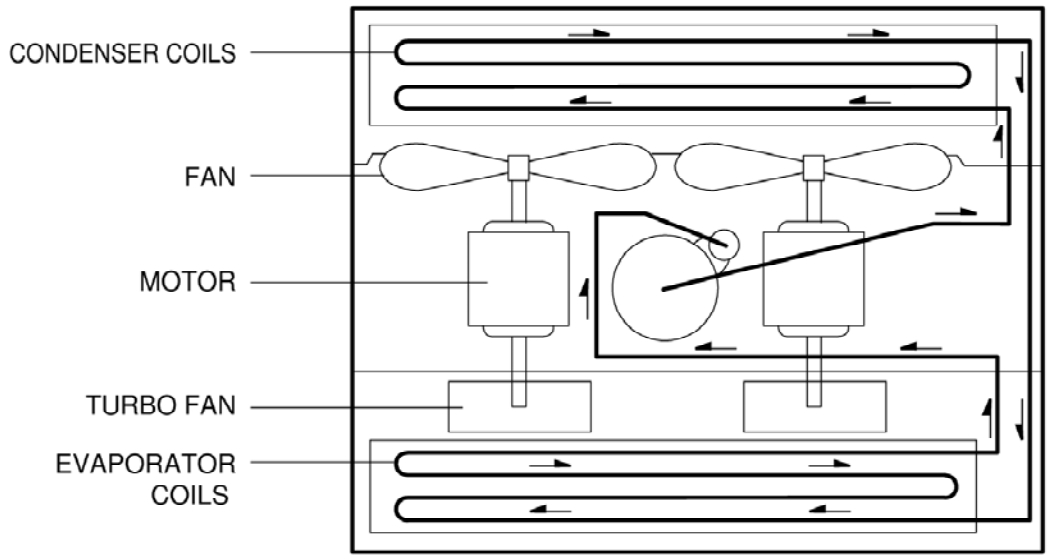


Components Location(For Display P.W.B ASM)



Troubleshooting Guide

Piping System



The lower Figure 12 is a brief description of the important components and their function in what is called the refrigeration system. This will help you to understand the refrigeration cycle and the flow of the refrigerant in the cooling cycle.

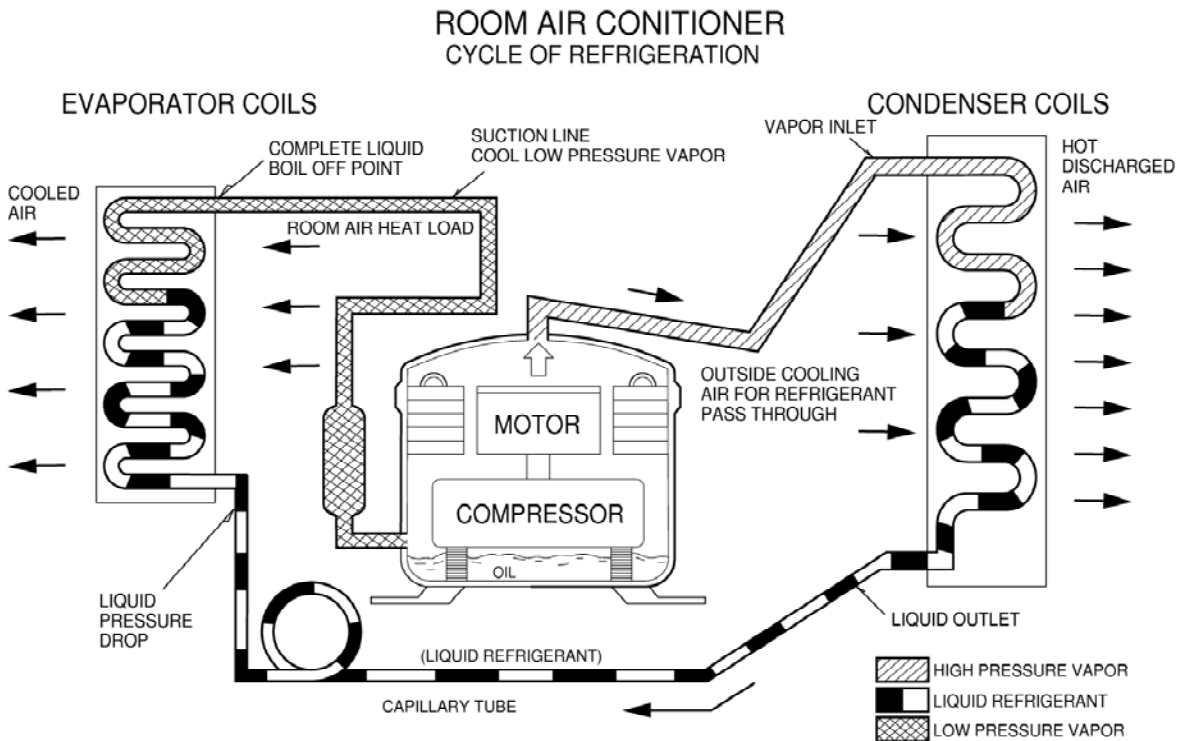
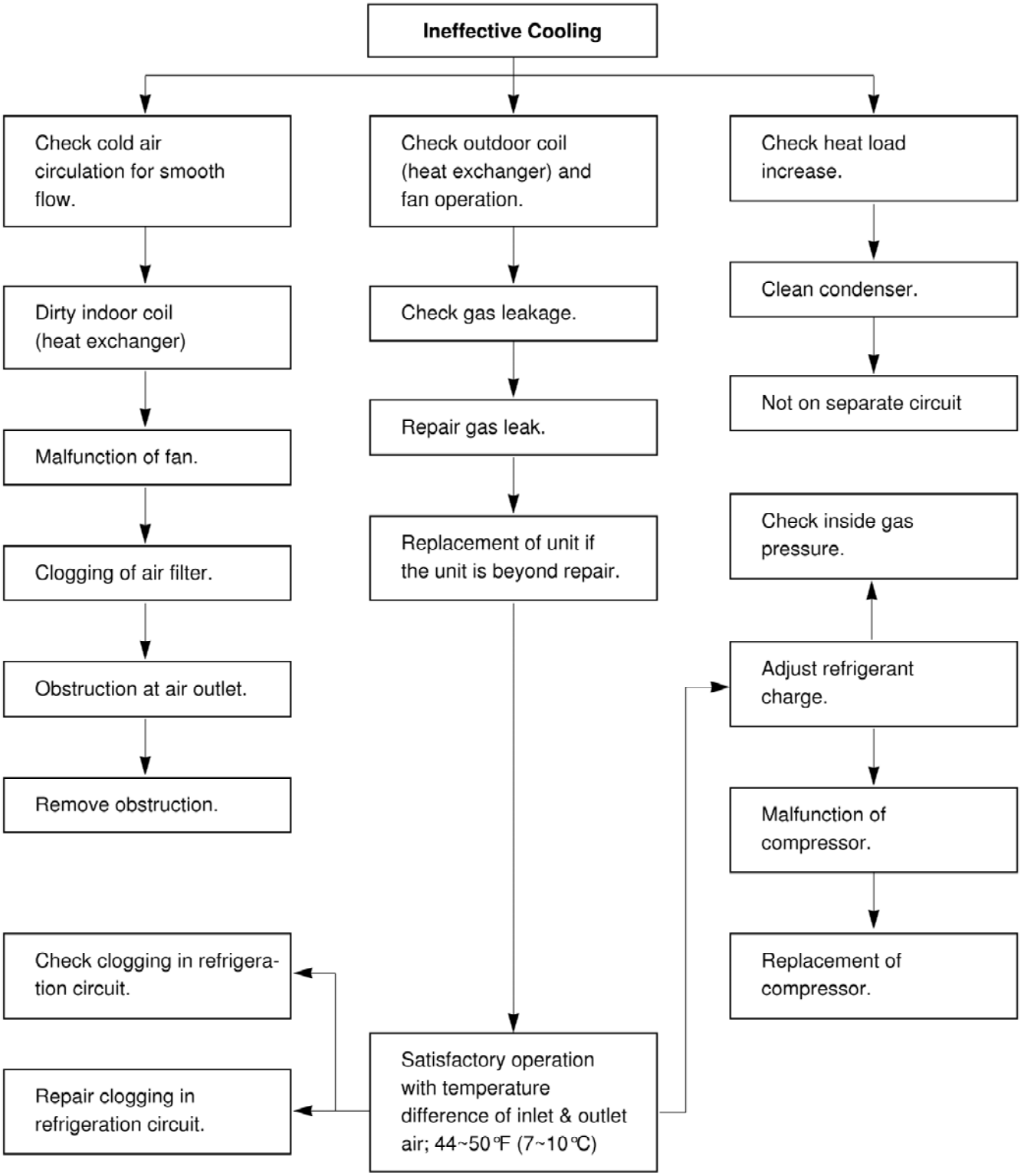


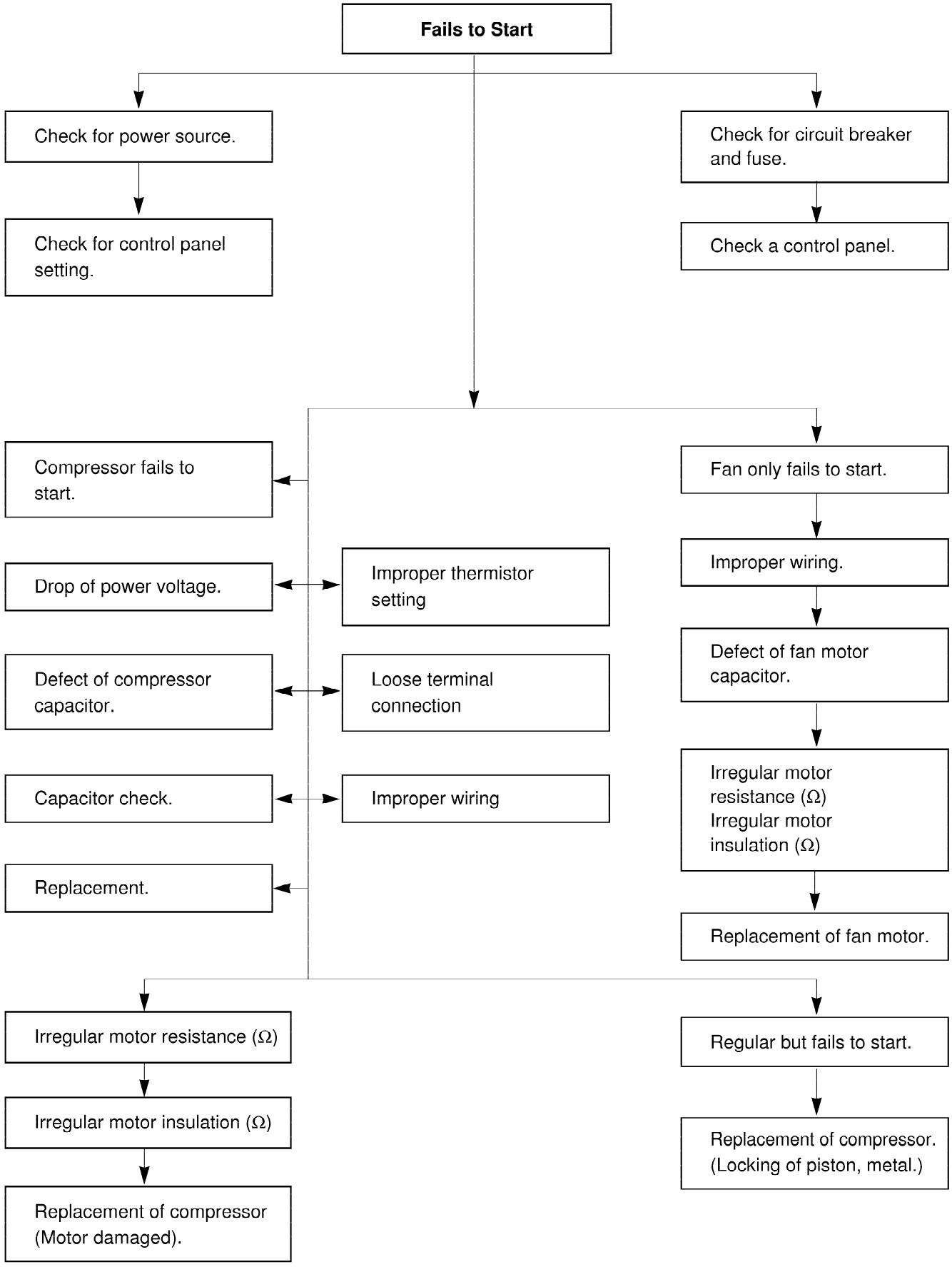
Figure 12

Troubleshooting Guide

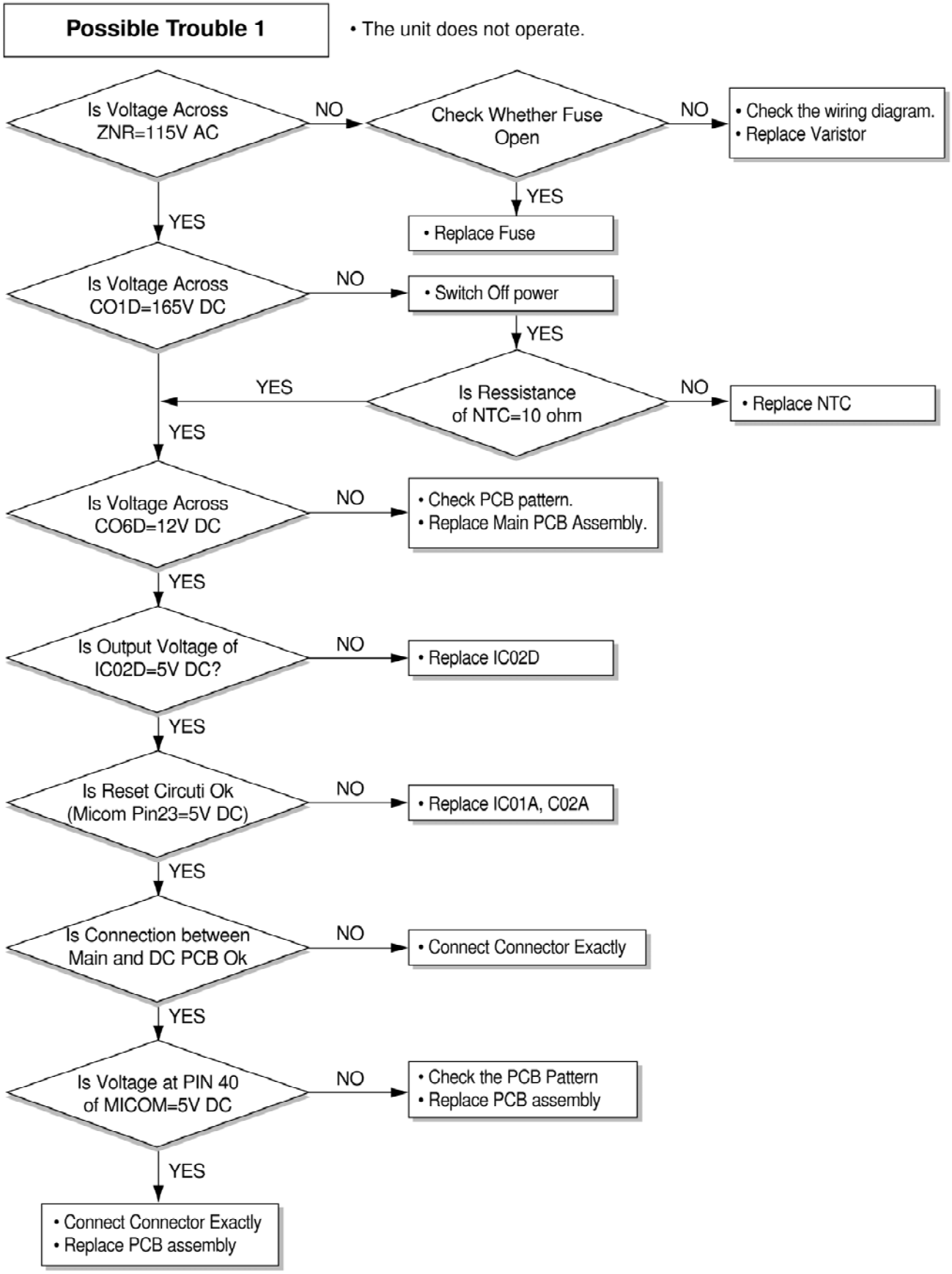
In general, possible trouble is classified in two kinds.
The one is called Starting Failure which is caused from an electrical defect, and the other is ineffective Air Conditioning caused by a defect in the refrigeration circuit and improper application.

Unit runs but poor cooling.



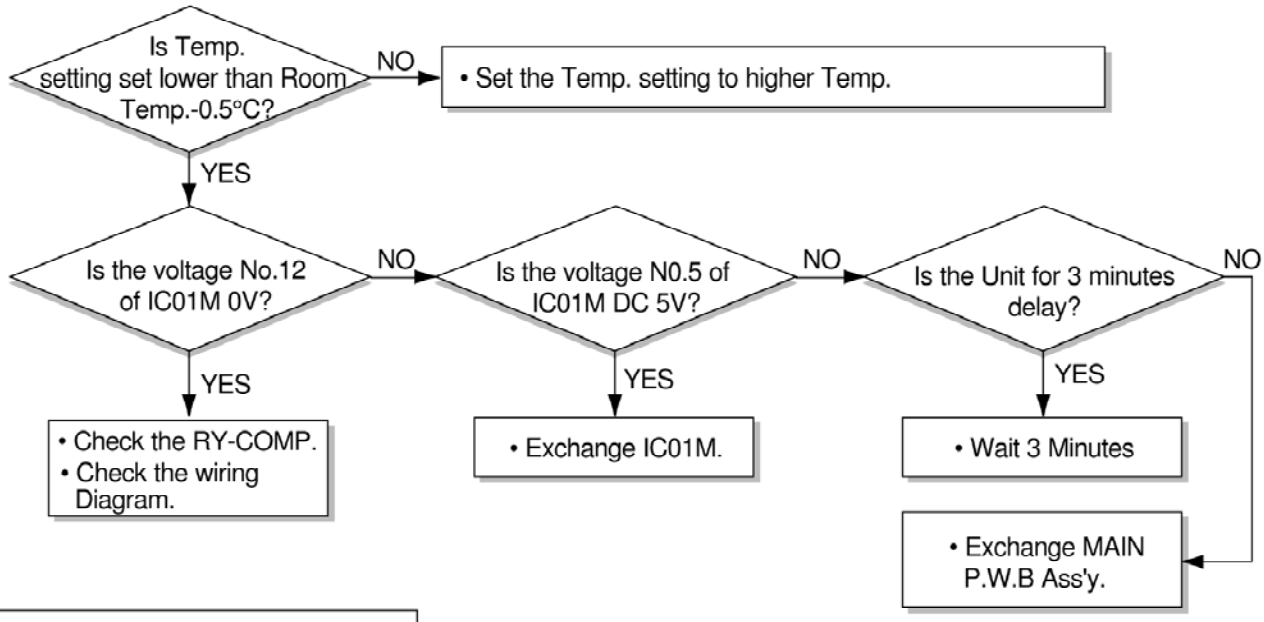

Fails to Start
Check for power source.
Check for control panel setting.
Check for circuit breaker and fuse.
Check a control panel.
Compressor fails to start.
Drop of power voltage.
Defect of compressor capacitor.
Capacitor check.
Replacement.
Improper thermistor setting
Loose terminal connection
Improper wiring
Fan only fails to start.
Improper wiring.
Defect of fan motor capacitor.
Irregular motor resistance (Ω)
Irregular motor insulation (Ω)
Replacement of fan motor.
Irregular motor resistance (Ω)
Irregular motor insulation (Ω)
Replacement of compressor (Motor damaged).
Regular but fails to start.
Replacement of compressor. (Locking of piston, metal.)

ELECTRIC PARTS TROUBLESHOOTING GUIDE:



Possible Trouble 2

• The compressor does not operate.

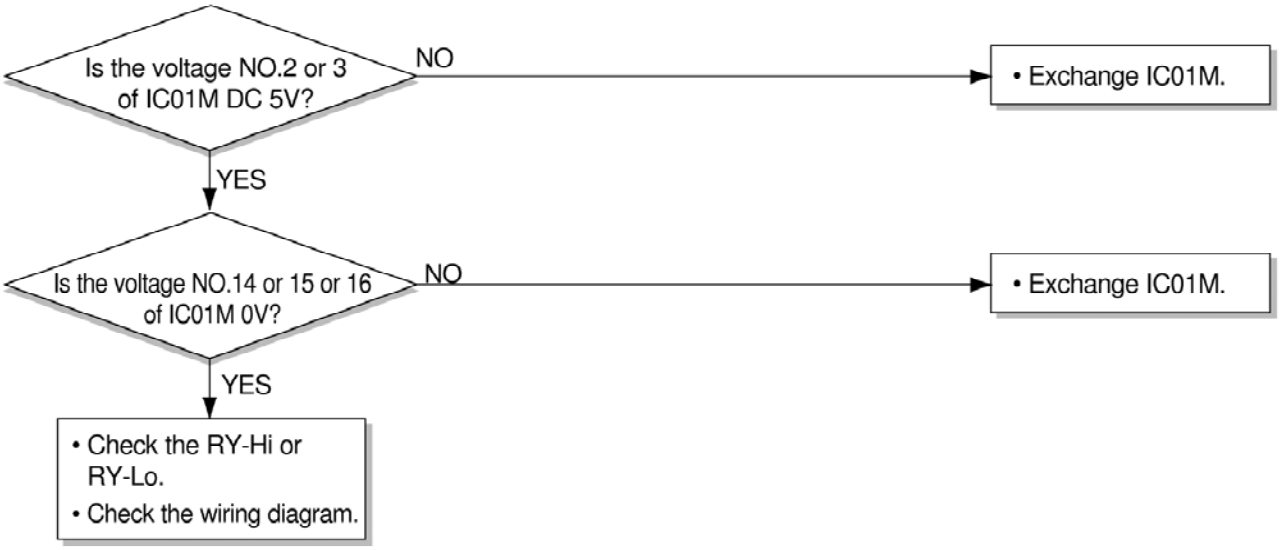


Possible Trouble 3

• The compressor always operate.

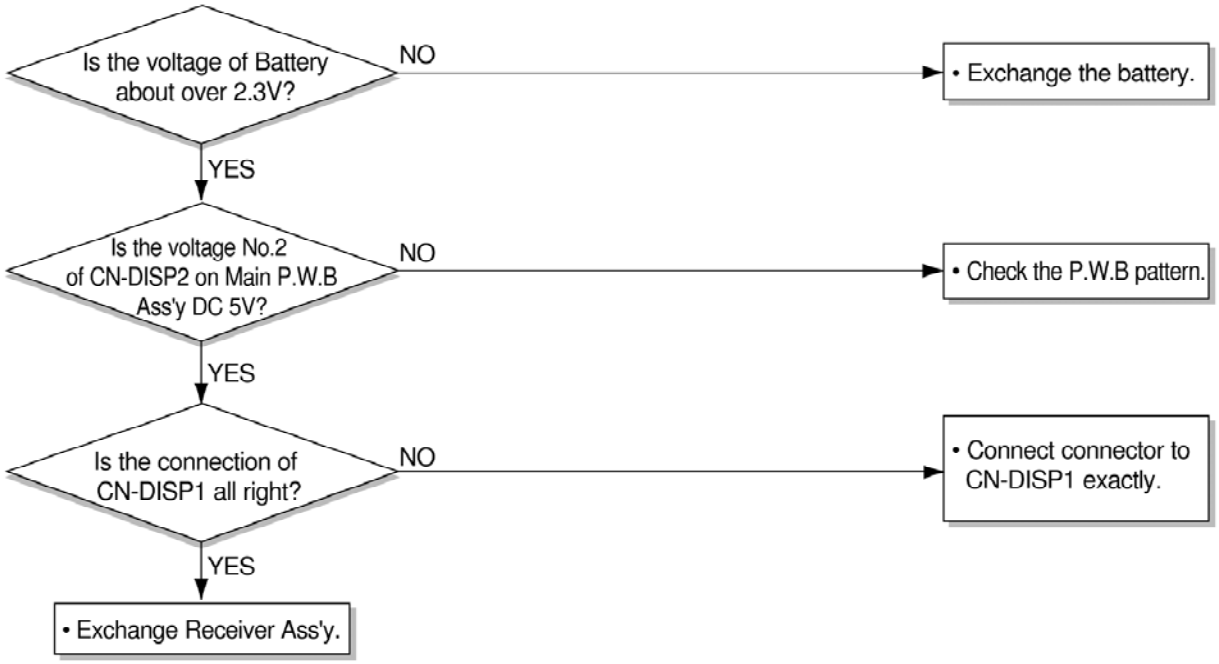
Possible Trouble 4

• Fan does not operate.



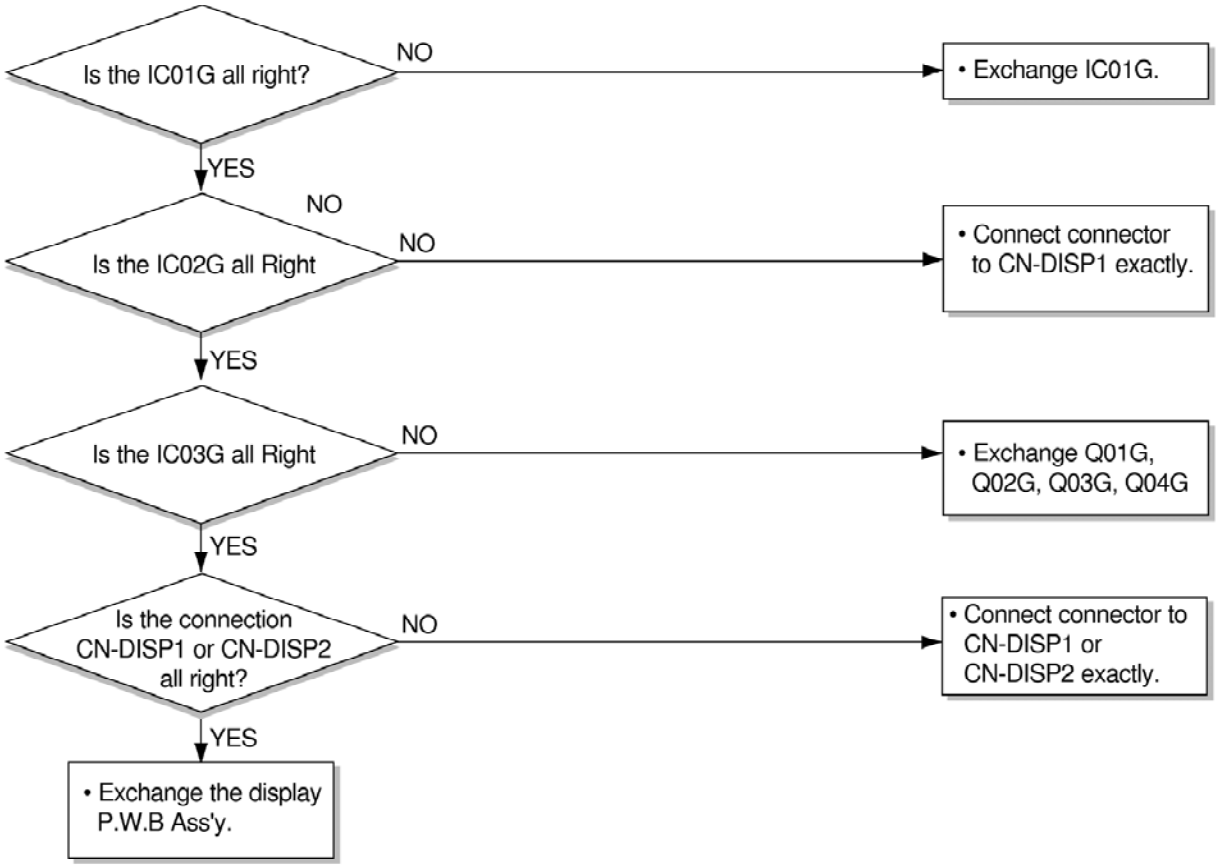
Possible Trouble 5

• Romote controller does not operate.



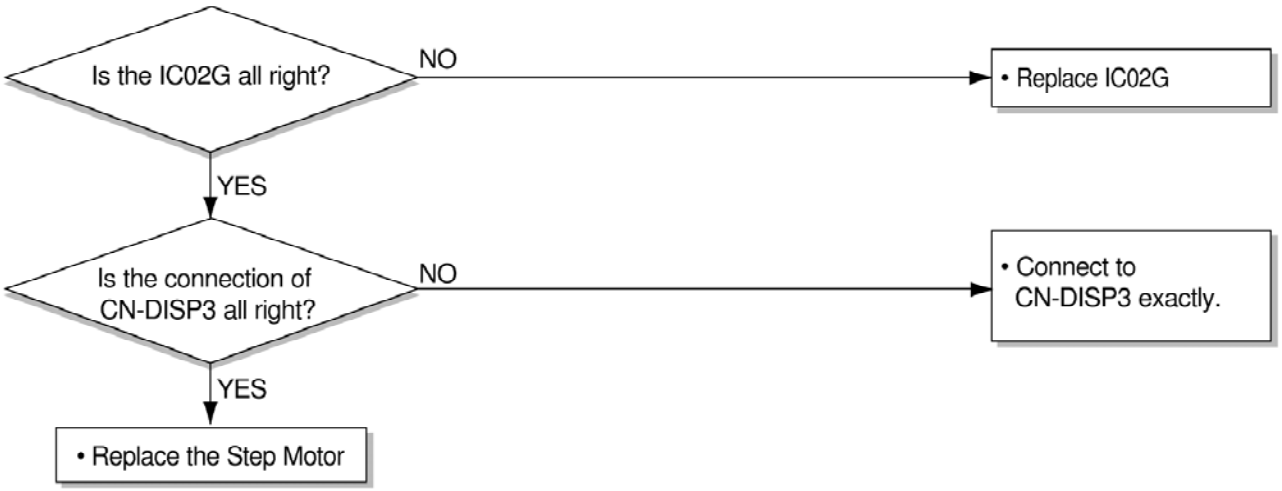
Possible Trouble 6

• It displays abnormally on Display P.W.B Ass'y.



Possible Trouble 7

• Auto door does not operate.



ROOM AIR CONDITIONER VOLTAGE LIMITS

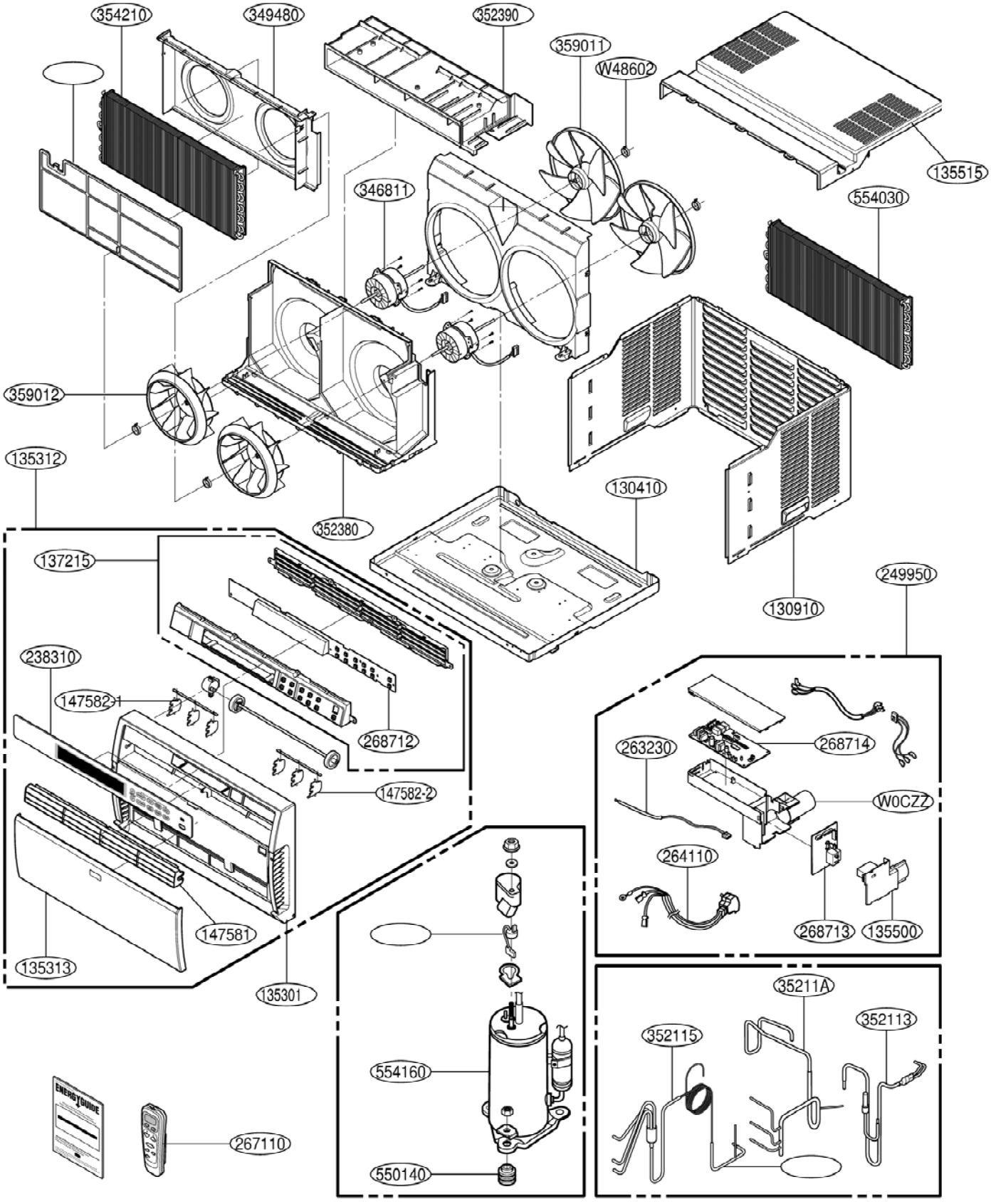
NAME PLATE RATING	MINIMUM	MAXIMUM
115V ± 10%	103.5V	126.5V

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.
	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 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.
	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.)

COMPLAINT	CAUSE	REMEDY
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.)
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.
	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.

Exploded View



Replacement Parts List

LOCATION NO	DESCRIPTION	PART NO
		LA1000PR
130410	BASE ASSEMBLY,SINGLE	3041A10053B
130910	CABINET ASSEMBLY,SINGLE	3091A10066A
135312	GRILLE ASSEMBLY,FRONT(SINGLE)	3531A11016B
135313	GRILLE ASSEMBLY,INLET	3720A20285A
135500	COVER,CONTROL(INDOOR)	3550A20283A
137215	PANEL ASSEMBLY,CONTROL	3721A20200A
146812	MOTOR ASSEMBLY,STEP	4681A20055P
147581	LOUVER,HORIZONTAL	4758A20067A
149980	SHROUD	4999A20003A
152302	FILTER(MECH),A/C	5231A20034A
159900-1	VANE,VERTICAL	4758A20068B
159900-2	VANE,VERTICAL	4758A20068A
238310	ESCUTCHEON	3831A20101A
249950	CONTROL BOX ASSEMBLY,SINGLE	4995A20407B
263230	THERMISTOR ASSEMBLY	6323A20004X
264110	POWER CORD ASSEMBLY	6411A20042A
267110	REMOTE CONTROLLER	6711A20052M
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20470A
668713	PWB(PCB) ASSEMBLY,SUB	6871A20468A
268714	PWB(PCB) ASSEMBLY,MAIN	6871A20469B
346811	MOTOR ASSEMBLY,SINGLE	4681A20069Z
349480	ORIFICE	4948A10028A
352113	TUBE ASSEMBLY,DISCHARGE SINGLE	5211A22034A
352115	TUBE ASSEMBLY,EVAPORATOR OUT	5211A20388J
35211A	TUBE ASSEMBLY,SUCTION SINGLE	5211A20228Y
352390-1	AIR GUIDE ASSEMBLY(UPPER)	5239A20022A
352390-2	AIR GUIDE ASSEMBLY	5238A00001A
354210	EVAPORATOR ASSEMBLY,FIRST	5421A10026K
359012	FAN,TURBO	5900A10013A
550140	ISOLATOR,COMP	4830AR4335A
552113	TUBE ASSEMBLY,CONDENSER OUT	5211A21272A
554030	CONDENSER ASSEMBLY,FIRST	5403A20191A
554160	COMPRESSOR	2520UKAC2KA
559010	FAN ASSEMBLY,AXIAL	5900A10014A
567502	O.L.P	6750U-L031A
731373	INSTALL PARTS ASSEMBLY,SINGLE	3127A20083B
738290	MANUAL,OWNERS	3828A20307V
738281	MANUAL,SERVICE	3828A20306P
W0CZZ	CAPACITOR	0CZZA20007S
W48602	CLAMP,SPRING	3H02932B

LG Electronics Inc.

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