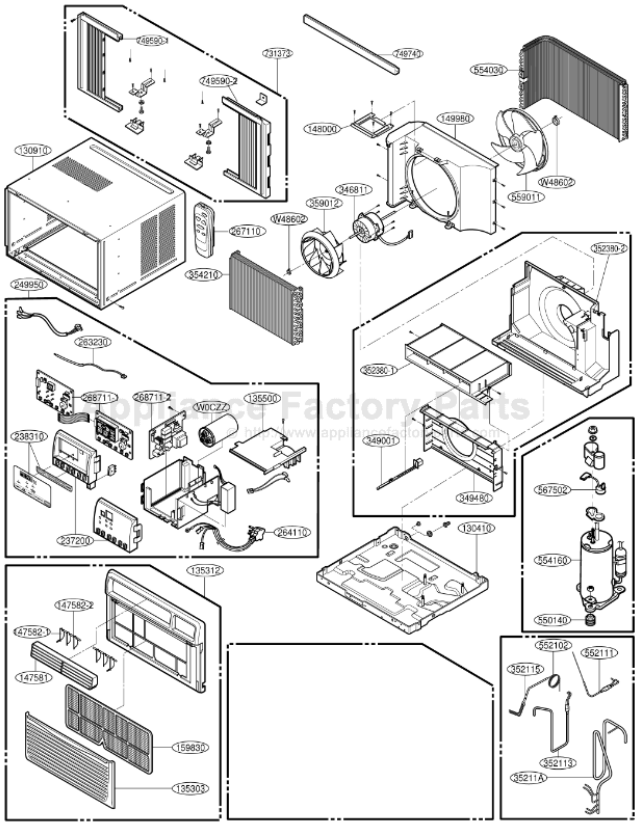
# FRIEDRICH ZQ08C10 Owner's Manual







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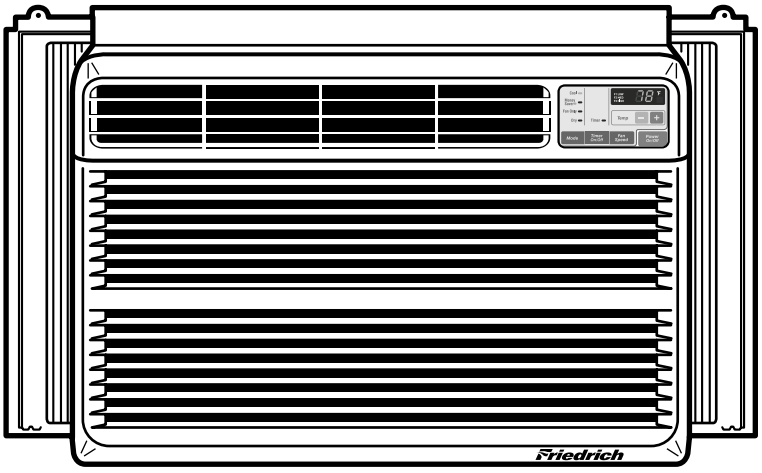
Friedrich

# Room Air Conditioner Service and Parts Manual




115Volts • ZQ08C10 • ZQ10C10 • CP08C10 • CP10C10 • CP12C10

ZQ08 - CP12 (05/06)

# CONTENTS



# 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, turn the unit 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 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 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 each working status.
4. The value should be over 1 MΩ.

## 1.3 SPECIFICATIONS

### 1.3.1 FOR ZQ08C10,ZQ10C10,CP08C10,CP10C10,CP12C10

| ITEMS \ MODELS | | ZQ08C10 | ZQ10C10 | CP08C10 | CP10C10 | CP12C10 |
|---|---|---|---|---|---|---|
| POWER SUPPLY | | 1ø, 115V, 60HZ | | | | |
| COOLING CAPACITY | (Btu/h) | 7,800 | 9,800 | 7,800 | 10,000 | 11,800 |
| INPUT | (W) | 800 | 1,000 | 730 | 920 | 1,090 |
| RUNNING CURRENT | (A) | 7.6 | 9.4 | 6.6 | 8.5 | 10.1 |
| E.E.R | (BTU/W.h) | 9.7 | 9.8 | 10.8 | | |
| OPERATING CONDITION | INDOOR (¡C) | 26.7(DB)* 19.4(WB)** | | | | |
| | OUTDOOR (¡C) | 35(DB)* 23.9(WB)** | | | | |
| REFRIGERANT (R-22) CHARGE | | 300g(10.6oz) | 520g(18.3oz) | 420g(14.8oz) | 525g(18.5oz) | 510g(18.0oz) |
| EVAPORATOR | | 2 ROW 11STACKS | 3 ROW 11STACKS | | 2 ROW 10STACKS | 3 ROW 12STACKS |
| CONDENSER | | 2 ROW 16STACKS | 2 ROW 16STACKS(L) | | 2 ROW 17STACKS | 2 ROW 17STACKS(L) |
| FAN, INDOOR | | TURBO FAN | | | | |
| FAN, OUTDOOR | | PROPELLER TYPE FAN WITH SLINGER RING | | | | |
| FAN SPEEDS, FAN/COOLING | | 2/3 | | 3/3 | | |
| FAN MOTOR | | 6 POLES | | | | |
| OPERATION CONTROL | | ROTARY SWITCH | | REMOTE CONTROLLER | | |
| ROOM TEMP. CONTROL | | THERMOSTAT | | THERMISTOR | | |
| AIR DIRECTION CONTROL | | VERTICAL LOUVER (RIGHT & LEFT) | | | | |
| | | HORIZONTAL LOUVER (UP & DOWN) | | | | |
| CONSTRUCTION | | SLIDE IN-OUT CHASSIS | | | | |
| PROTECTOR | COMPRESSOR | OVERLOAD PROTECTOR | | | | |
| | FAN MOTOR | INTERNAL THERMAL PROTECTOR | | | | |
| POWER CORD | | (3 WIRE WITH GROUDING) | | | | |
| | | ATTACHMENT PLUG (CORD-CONNECTED TYPE) | | | | |
| DRAIN SYSTEM | | DRAIN PIPE OR SPLASHED BY FAN SLINGER | | | | |
| NET WEIGHT | (lbs/kg) | 62/28 | | | | |
| OUTSIDE DIMENSION (W x H x D) | (inch) | $20\frac{3}{32}$ x $13\frac{29}{32}$ x $19\frac{3}{8}$ | | | | |
| | (mm) | 510 x 354 x 490 | | | | |

* DB:Dry Bulb
**WB:Wet Bulb

## 1.4 SPECIFICATIONS

1.4.1 FOR ZQ08N10,

| ITEMS \ MODELS | | CP08N10 |
|---|---|---|
| POWER SUPPLY | | 1ø, 115V, 60HZ |
| COOLING CAPACITY | (Btu/h) | 7,800 |
| INPUT | (W) | 800 |
| RUNNING CURRENT | (A) | 7.4 |
| E.E.R | (BTU/W.h) | 9.7 |
| OPERATING CONDITION | INDOOR (¡C) | 26.7(DB)* 19.4(WB)** |
| | OUTDOOR (¡C) | 35(DB)* 23.9(WB)** |
| REFRIGERANT (R-22) CHARGE | | 420g(14.8oz) |
| EVAPORATOR | | 3 ROW 11STACKS |
| CONDENSER | | 2 ROW 16STACKS(L) |
| FAN, INDOOR | | TURBO FAN |
| FAN, OUTDOOR | | PROPELLER TYPE FAN WITH SLINGER RING |
| FAN SPEEDS, FAN/COOLING | | 3/3 |
| FAN MOTOR | | 6 POLES |
| OPERATION CONTROL | | REMOTE CONTROLLER |
| ROOM TEMP. CONTROL | | THERMISTOR |
| AIR DIRECTION CONTROL | | VERTICAL LOUVER (RIGHT & LEFT) |
| | | HORIZONTAL LOUVER (UP & DOWN) |
| CONSTRUCTION | | SLIDE IN-OUT CHASSIS |
| PROTECTOR | COMPRESSOR | OVERLOAD PROTECTOR |
| | FAN MOTOR | INTERNAL THERMAL PROTECTOR |
| POWER CORD | | (3 WIRE WITH GROUDING) |
| | | ATTACHMENT PLUG (CORD-CONNECTED TYPE) |
| DRAIN SYSTEM | | DRAIN PIPE OR SPLASHED BY FAN SLINGER |
| NET WEIGHT | (lbs/kg) | 62/28 |
| OUTSIDE DIMENSION (W x H x D) | (inch) | $20\frac{3}{32}$ x $13\frac{29}{32}$ x $19\frac{3}{8}$ |
| | (mm) | 510 x 354 x 490 |

* DB:Dry Bulb
**WB:Wet Bulb

## 1.4 FEATURES

- Designed for COOLING ONLY.
- Slide-out chassis for the simple installation and service.
- Low air-intake, top cooled-air discharge.
- adjustable thermostat
- Washable one-touch filter
- Compact size

## 1.5 CONTROL LOCATIONS

**• THERMOSTAT (Fig A)**

Thermostat will control the temperature of the discharge air. For a cooler setting, turn clockwise, For a warmmer setting, turn counter clockwise.

CONTROLS -"ZQ"MODELS

**• OPERATION (Fig A)**

OFF : Turns the air conditioner off.

MED FAN : Medium fan speed without cooling.

LOW FAN : Low fan speed without cooling.

HIGH COOL : Cooling with the high fan speed.

MED COOL : Cooling with the medium fan speed.

LOW COOL : Cooling with the low fan speed.

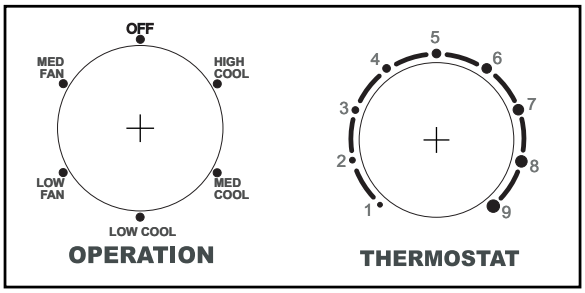



Fig A

CONTROLS - "CP" MODELS

DISPLAY

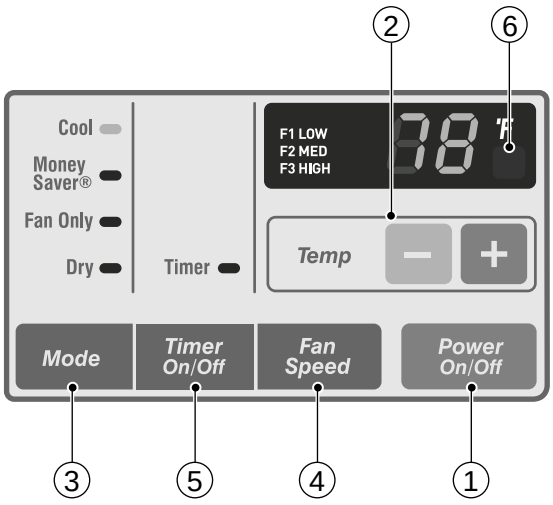



Fig B

REMOTE CONTROL

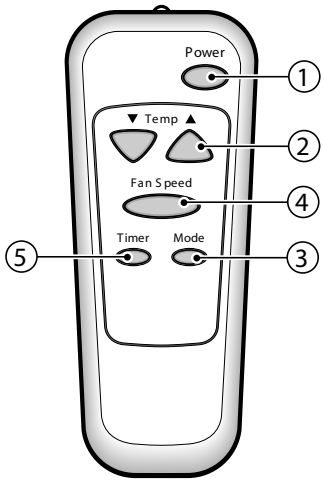



Fig C

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

**Refer to Fig B&Fig C**

**1 POWER BUTTON**

To turn the air conditioner ON and OFF.
This button takes priority over any other buttons.

**2 TEMPERATURE SETTING BUTTON**

This button can control temperature of the room. The temperature can be adjusted within a range of 60°F to 86°F by 1°F,Select the lower number for lower temperature of the room.

**3 OPERATION MODE SELECTION BUTTON**

Push this button, it will shift operation between COOL, ENERGY SAVER, FAN and DRY modes.

- Energy Saver: If Energy Save mode is selected, the fan stops when the compressor stops running
  Approximately every 3 minutes the fan will turn on and check the room air to determine if cooling is needed.

**4 FAN SPEED SELECTOR**

Push this button, to shift fan speeds, as follows.
(Hi ➔ Low ➔ Med ➔ Hi ➔ Low ➔...)

**5 ON/OFF TIMER BUTTON**

ON - When the air conditioner is off, it can be set to automatically turn on.

OFF - When the airconditioner is on, it can be set to automatically turn off.

# 2. DISASSEMBLY INSTRUCTIONS

— Before servicing the unit,turn the unit OFF and disconnet the power cord.

## 2.1 MECHANICAL PARTS

### 2.1.1 FRONT GRILLE

1. Open the Inlet grille downward and remove the air filter.
2. Remove the screw which fastens the front grille.(See Figure 1)
3. Pull the front grille from the right side.
4. Remove the front grille.(There are 4 hooks.)
5. Re-install the components by referring to the removal procedure, above.

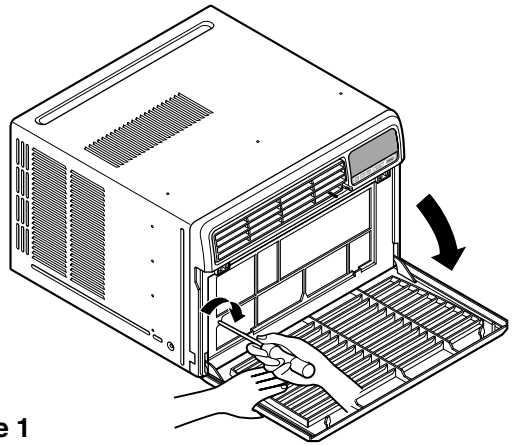


**Figure 1**

### 2.1.2 CABINET

1. After removing the FRONT GRILLE, remove the 2 screws which fasten the cabinet at both sides.
2. Remove the 2 screws which fasten the cabinet at the back.
3. Pull the base pan forward. (See Figure 2)
4. Remove the cabinet.
5. Re-install the components by referring to the removal procedure, above.

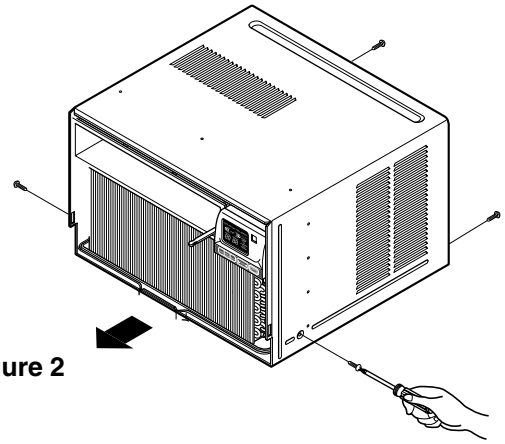


**Figure 2**

### 2.1.3 CONTROL BOX

1. Remove the front grille. (Refer to section 2.1.1)
2. Remove the cabinet. (Refer to section 2.1.2)
3. Remove the 2 screws which fasten the power cord.
4. Disconnect the grounding screw from the evaporator channel.
5. Remove the 1 screw which fastens the control box cover.
6. Remove the housing which connects PCB(the control panel ) (CP 08/10/12) or connector(ZQ 08/10) and motor wire in the control box.
7. Remove the nut which fastens the terminal cover.
8. Remove the terminal cover.
9. Remove all the leads from the overload protector.
10. Discharge the capacitor by placing a 20,000 ohm resistor across the capacitor terminals.
11. Raise the control box upward . (See Figure 3)
12. Re-install the components by referring to the removal procedure, above. (Refer to the circuit diagram found on page 19 in this manual and on the control box.)

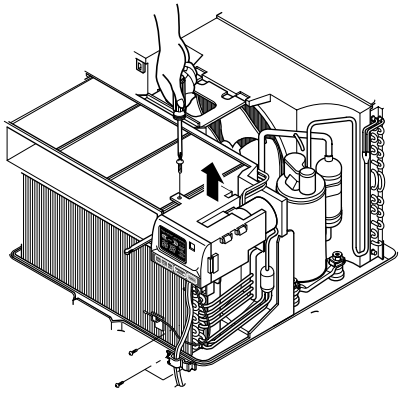


**Figure 3**

# 2.2 AIR HANDLING PARTS

## 2.2.1 AIR GUIDE AND TURBO FAN

1. Remove the front grille. (Refer to section 2.1.1)
2. Remove the cabinet. (Refer to section 2.1.2)
3. Remove the control box. (Refer to section 2.1.3)
4. Remove the 4 screws which fasten the brace.
5. Remove the brace.
6. Remove the 2 screws which fasten the discharge air guide.
7. Remove the air guide upper.(See figure 4)
8. Remove the 2 screws which fasten the evaporator.
9. Move the evaporator forward pulling it upward slightly. (See Figure 5)
10. Pull the hook out of orifice by pushing the tabs and remove it. (See Figure 6)
11. Using pliers remove the clamp which secures the turbo fan.
12. Remove the turbo fan.
13. Remove the 2 screws which fasten the air guide to the base pan.
14. Move the air guide backward, and pull out from the base pan.(Move the lower air guide carefully.)
15. Re-install the components by referring to the removal procedure, above.

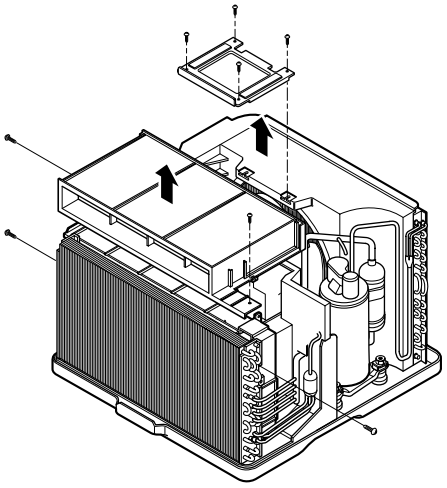


**Figure 4**

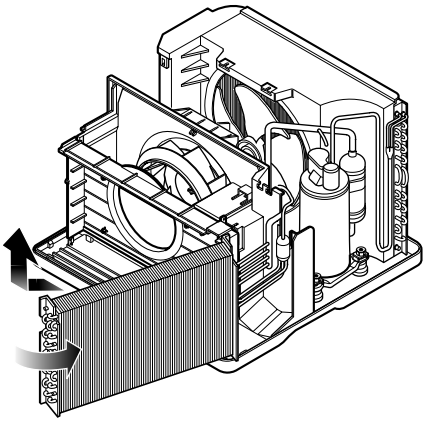


**Figure 5**

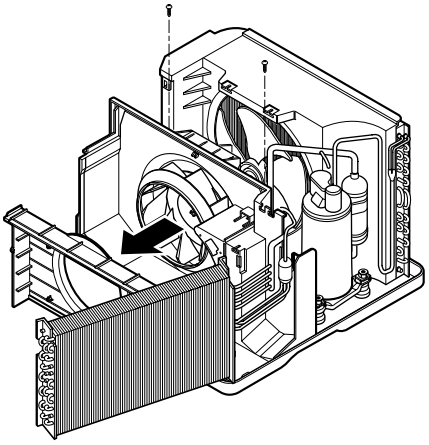


**Figure 6**

## 2.2.2 FAN

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the brace (Refer to section 2.2.1)
3. Remove the 5 screws which fasten the condenser.
4. Move the condenser to the left carefully.
5. Remove the clamp which secures the fan.
6. Remove the fan. (See Figure 7)
7. Re-install by referring to the removal procedure.

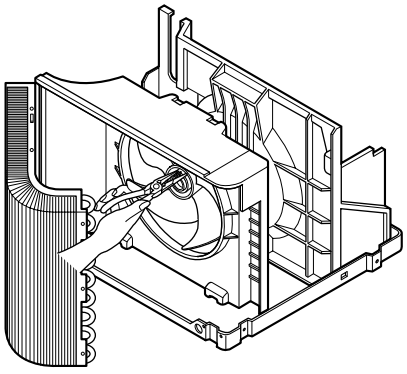


**Figure 7**

### 2.2.3 SHROUD

1. Remove the fan. (Refer to section 2.2.2)
2. Remove the shroud. (See Figure 8)
3. Re-install the components by referring to the removal procedure, above.

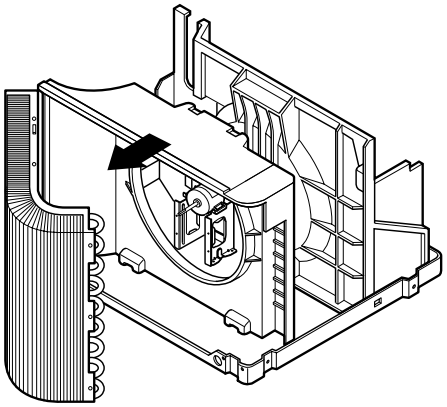


**Figure 8**

## 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. (See Figure 9)
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.

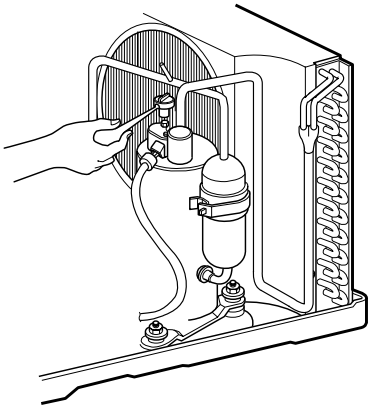


**Figure 9**

### 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 to, install one (such as a WATCO A-1) before venting the Freon™. Remove the valve when finished
3. Remove the overload protector. (Refer to section 2.3.1)
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.
6. Remove the compressor. (See Figure 10)
7. Re-install the components by referring to the removal procedure, above.

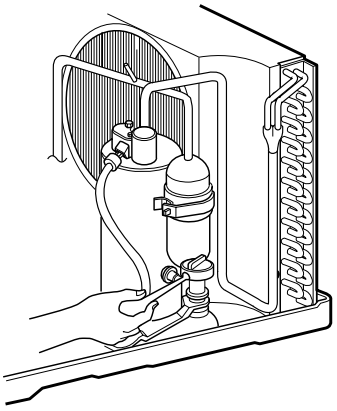


**Figure 10**

## 2.3.3 CAPACITOR

1. Remove the control box. (Refer to section 2.1.3)
2. Open the top cover from the control box. (See Figure 11)
3. Pull out the capacitor from the control box.
4. Disconnect all the leads of capacitor terminals.
5. Re-install the components by referring to the removal procedure, above.

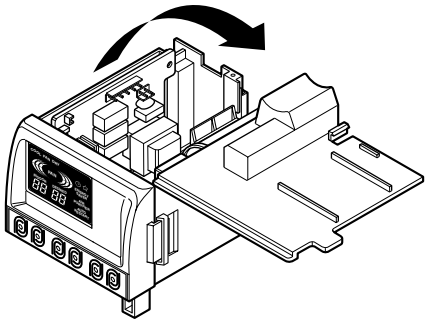


**Figure 11**

## 2.3.4 POWER CORD

1. Remove the control box. (Refer to section 2.1.3)
2. Open the top cover from the control box. (Refer to section 2.3.3)
3. Disconnect the front panel from the control box. (See Figure 12)
4. Disconnect the 2 receptacles and remove the grounding screw.
5. Pull out the power cord.
6. Re-install the component by referring to the removal procedure, above. (Use only one ground-marked hole for ground connection.)
7. If the supply cord of this appliance is damaged, it must be replaced by the factory supplied cord.

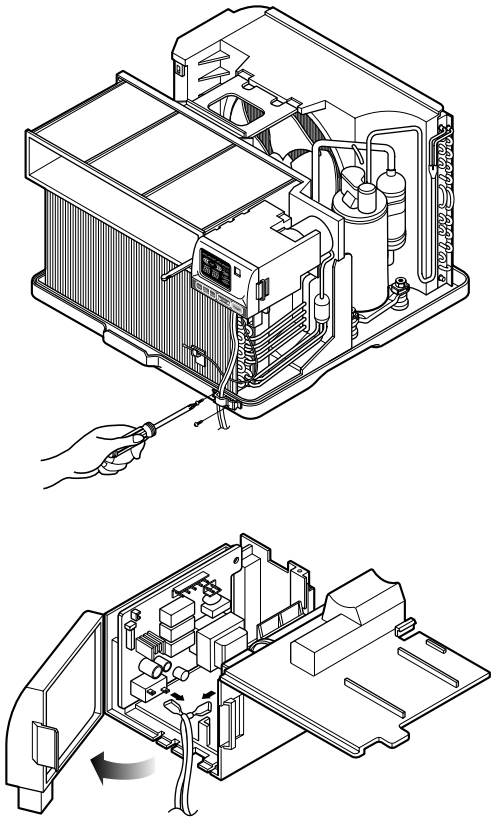


**Figure 12**

### 2.3.5 MOTOR

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the turbo fan. (Refer to section 2.2.1)
3. Remove the fan. (Refer to section 2.2.2)
4. Remove the 4 screws which fasten the motor to the air guide. (See Figure 13)
5. Remove the motor.
6. Re-install the components by referring to the removal procedure, above.(See Figure 13)

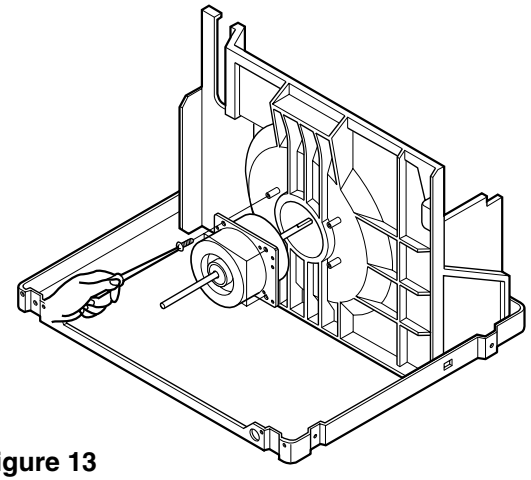


**Figure 13**

## 2.4 REFRIGERATION CYCLE

### 2.4.1 CONDENSER

**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™. Remove the valve when finished.

1. Remove the cabinet. (Refer to section 2.1.2)
2. Remove the 5 screws which fasten the brace.(Refer to section 2.2.1)
3. Remove the 5 screws which fasten the condenser and shroud.
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 Figure 14)

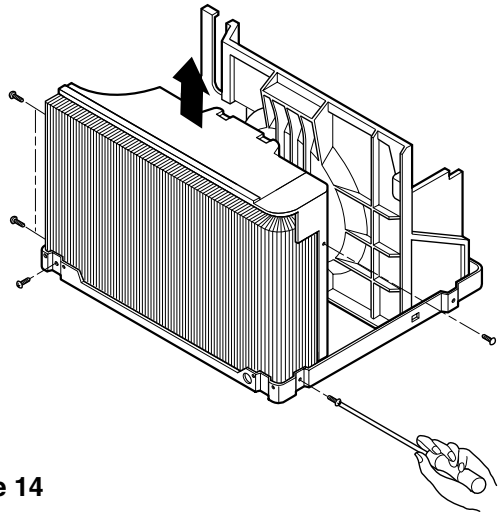


**Figure 14**

### 2.4.2 EVAPORATOR

1. Remove the control box.(Refer to section 2.1.3)
2. Remove the air guide upper. (Refer to section 2.2.1)
3. Remove the 2 screws which fasten the evaporator.
4. Move the evaporator sideways carefully. (Refer to section 2.2.1)
5. After discharging the refrigerant completely, unbraze the interconnecting tube at the evaporator connections.
6. Remove the evaporator.
7. Re-install the components by referring to notes. (See Figure 15)

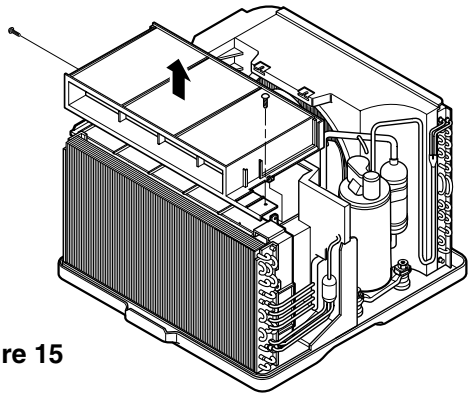


**Figure 15**

## 2.4.3 CAPILLARY TUBE

1. Remove the cabinet. (Refer to section 2.1.2)
2. After discharging the refrigerant completely, unbraze the interconnecting tube at the capillary tube.(See caution on previous page)
3. Remove the capillary tube.
4. Re-install the components by referring to notes.

**NOTES**

— 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™. Remove the valve when finished.

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. Evacuate as follows.
   1) Connect the vacuum pump, as illustrated figure 16A.
   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.

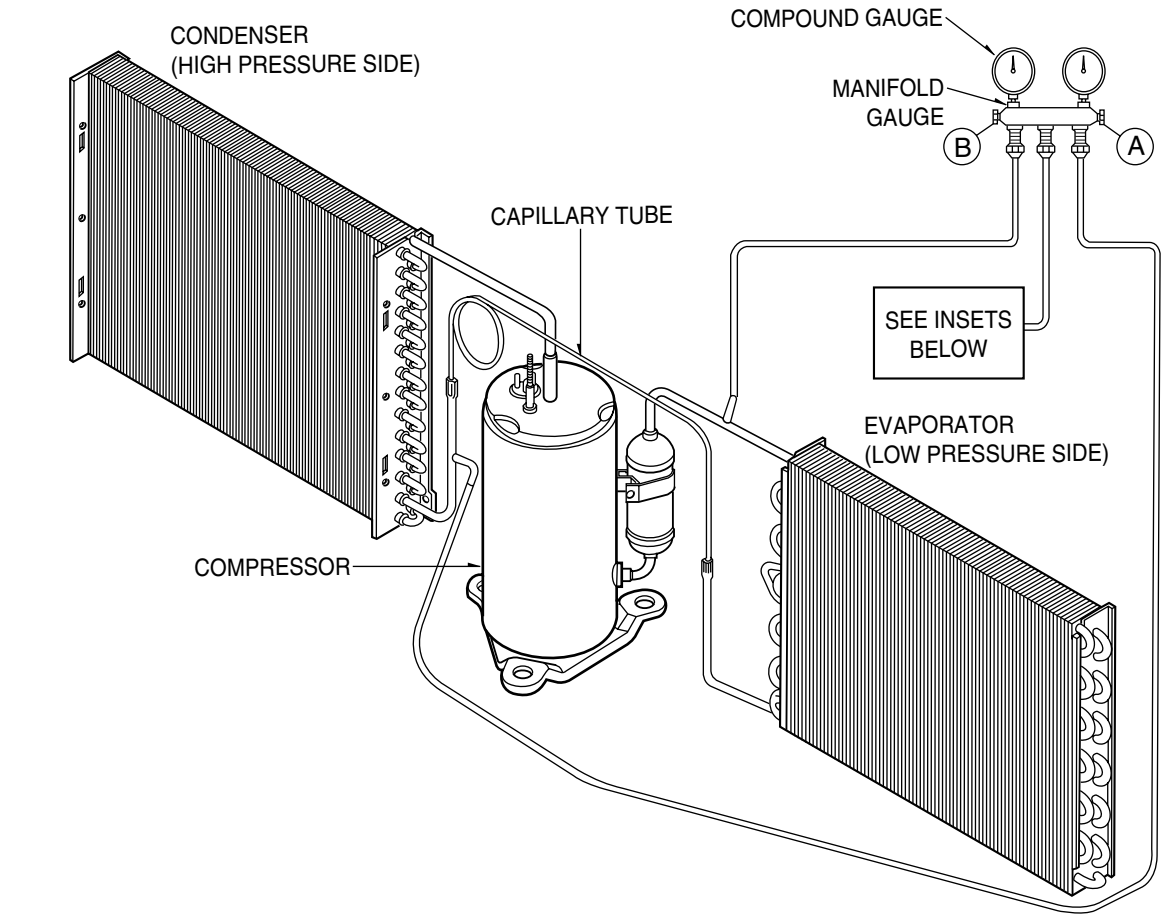
   **CAUTION**

   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 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 figure 16B.
      Open valve C.
      Discharge the line at the manifold connection.
   5) The system is now ready for final charging.

5. 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 16B.
      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 solder and solder pinch-off tube closed. Turn off the unit, allow it to set for a while, and then test for any leaks at 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 valves.



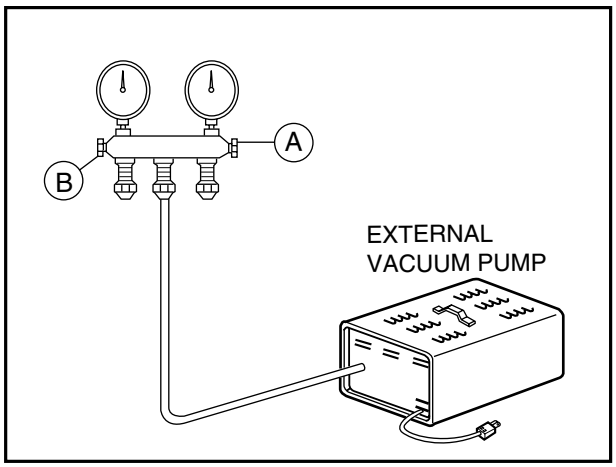




**Figure 16A-Pulling Vacuum**

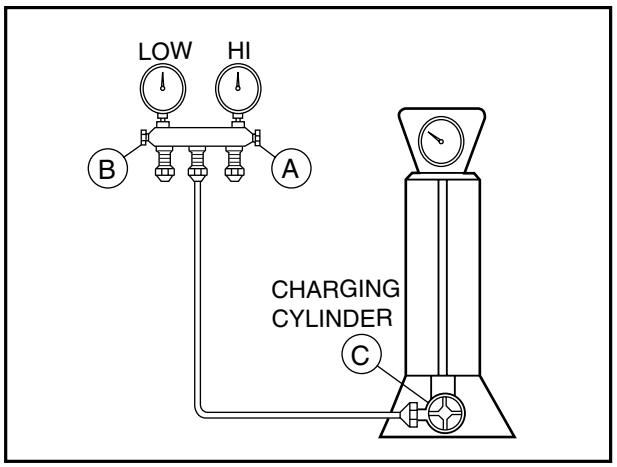
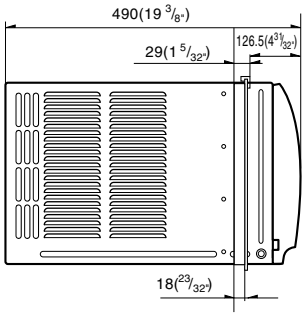


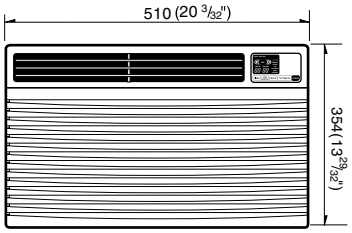

**Figure 16B-Charging**

# 3. TROUBLESHOOTING GUIDE

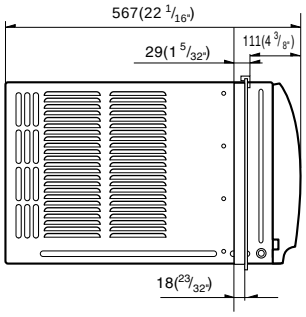
## 3.1 OUTSIDE DIMENSIONS unit: mm(inch)

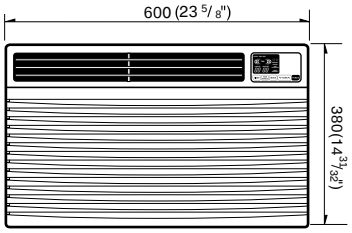
### MODEL: ZQ08B10,CP08A10,ZQ10B10




### MODEL:CP10A10,CP12A10



## 3.2 PIPING SYSTEM

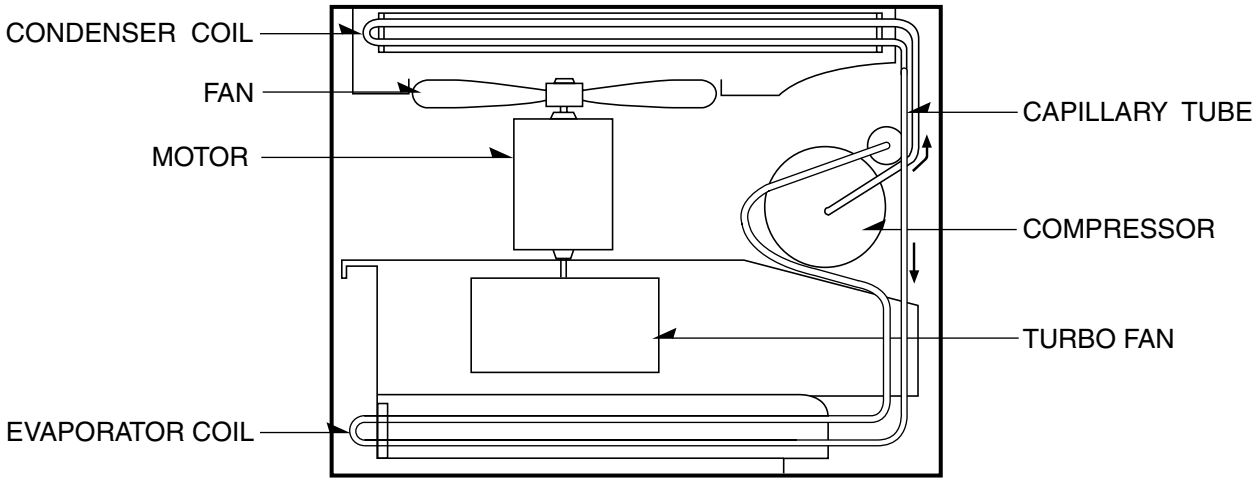



Figure 17 is a brief description of the important components and their function in what is called the refrigeration system. This will help you to understand the refrigeration cycle and the flow of the refrigerant in the cooling cycle.

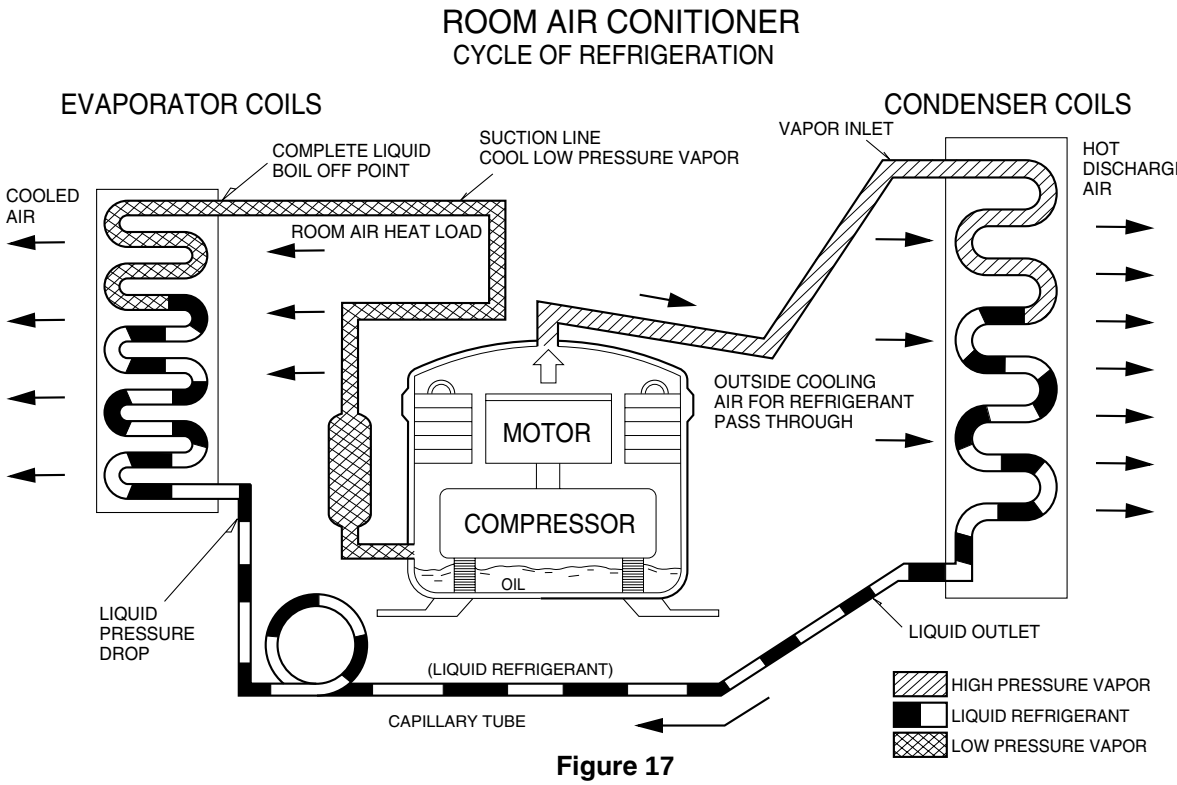
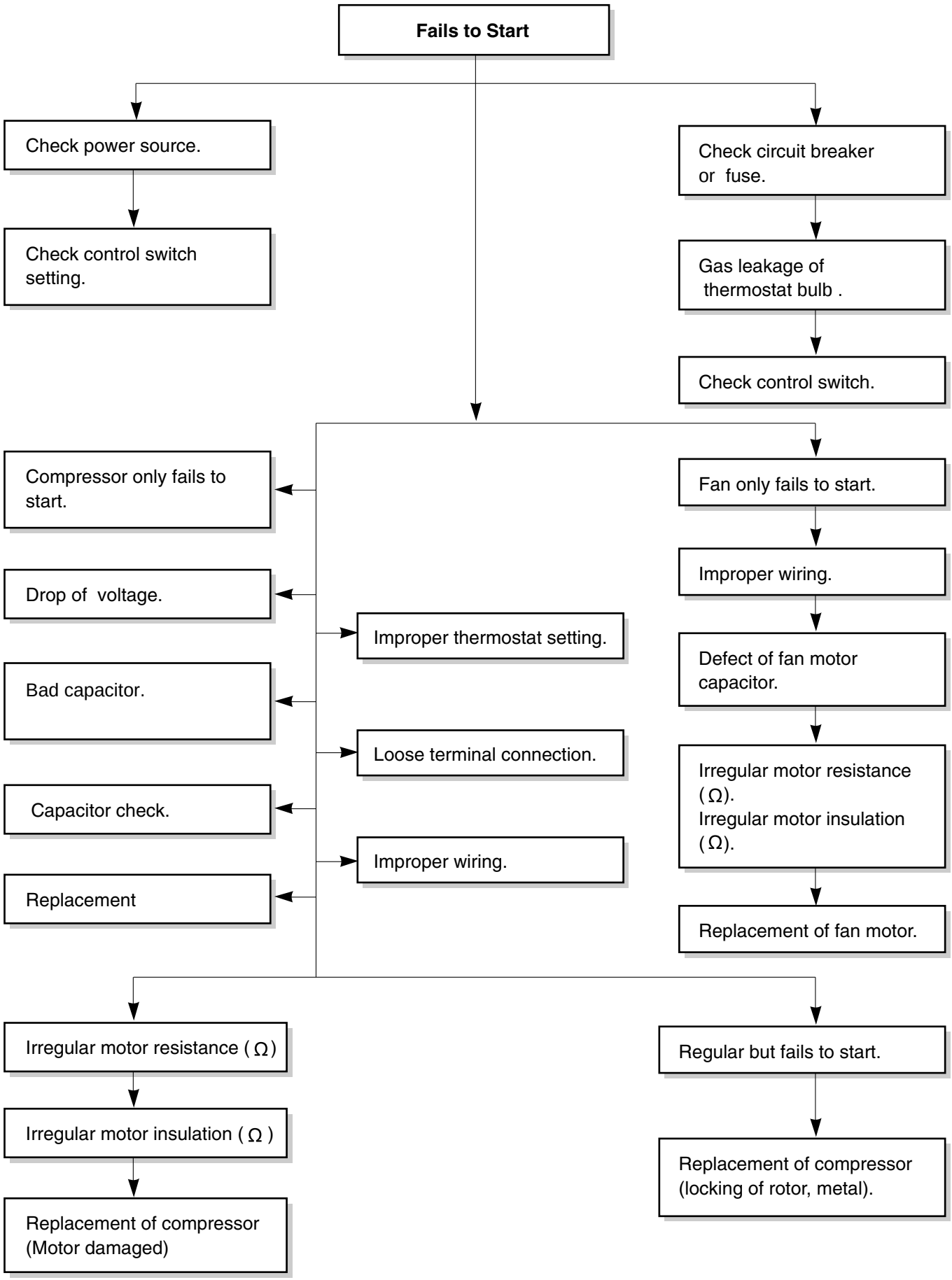



**Figure 17**

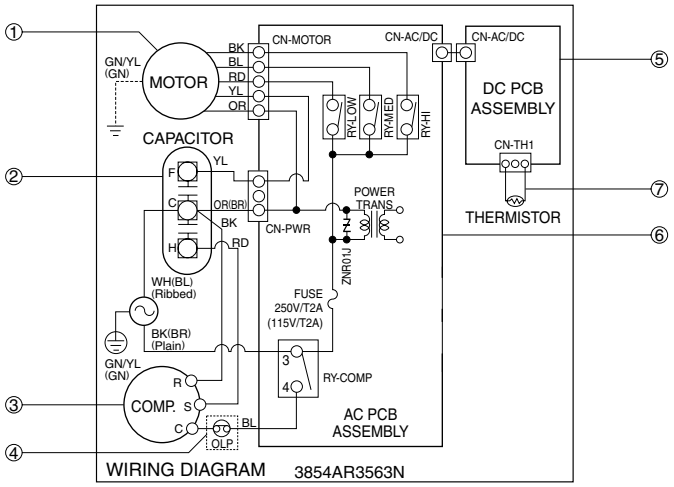

Fails to Start
Check power source.
Check control switch setting.
Check circuit breaker or fuse.
Gas leakage of thermostat bulb .
Check control switch.
Compressor only fails to start.
Drop of voltage.
Bad capacitor.
Capacitor check.
Replacement
Improper thermostat setting.
Loose terminal connection.
Improper 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 rotor, metal).

| 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 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.<br>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. Realign assembly.<br>Units using slinger ring for condenser fan must have $^{1}/_{4}$ to $^{5}/_{16}$ inch clearance to the base. If it hits the base, shim up the bottom of the fan motor with mounting screw(s).<br>Check fan motor bearings; if motor shaft will not rotate, replace the motor. |
| Fan motor runs intermittently | Revolves on overload. | Check voltage. If not within limits, call an electrician.<br>Test capacitor.<br>Check bearings. Does the fan blade rotate freely? If not, replace fan motor.<br>Pay attention to any change from high speed to low speed. If the speed does not change, replace the motor. |
| 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 clamp | 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, but fan motor runs. | Voltage | Check voltage.<br>If not within limits, call an electrician. |
| | Wiring | Check the wire connections, if loose, repair or replace the terminal. If wires are off, refer to wiring diagram for identification, and replace. Check wire locations. If not per wiring diagram, correct. |
| | Rotary | Check for continuity, refer to the wiring diagram for terminal identification. Replace the switch if circuit is open. |

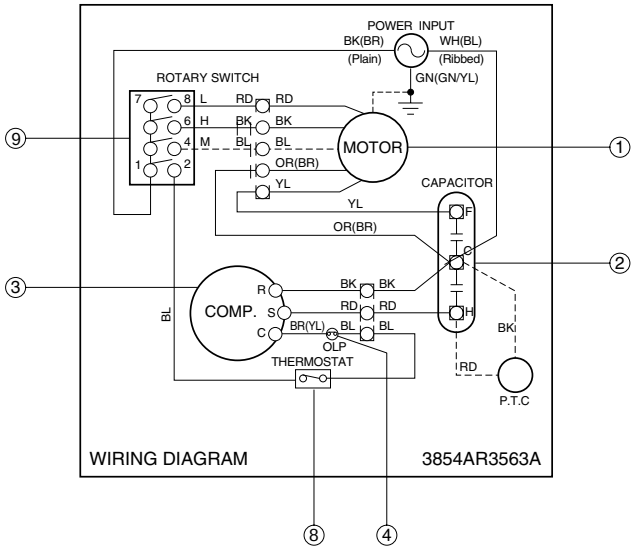
| COMPLAINT | CAUSE | REMEDY |
|---|---|---|
| Compressor will not run, but fan motor runs. | Thermostat | Check the position of knob. If not at the coldest setting, advance the knob to this setting and restart unit.<br>Check continuity of the thermostat. Replace thermostat if circuit is open. |
| | Capacitor (Discharge capacitor before servicing.) | Check the capacitor.<br>Replace if not within ±10% of manufacturers rating.<br>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 it, and retest.) |
| Compressor cycles on overload. | Voltage | Check the voltage.<br>If not within limits, call an electrician. |
| | Overload | Check overload, if externally mounted.<br>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 reassembling. |
| | Condenser fins (damaged) | If condenser fins are closed over a large area on the coil surface, head pressures will increase, causing the compressor to overload. Comb the fins or replace the coil. |
| Compressor cycles on overload. | Capacitor | Test capacitor. |
| | Wiring | Check the terminals. If loose, repair or replace. |
| | Refrigerating system | Check the system for a restriction. |
| Insufficient cooling or heating | Air filter | If restricted, blow out system or replace component. |
| | 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 air guide, rearrange the air handling parts. |
| | Copper tubing | Remove the cabinet carefully and rearrange tubing not to contact cabinet, compressor, shroud, and barrier. |

# 4. SCHEMATIC DIAGRAM

**MODEL: CP08C10, CP10C10, CP12C10**



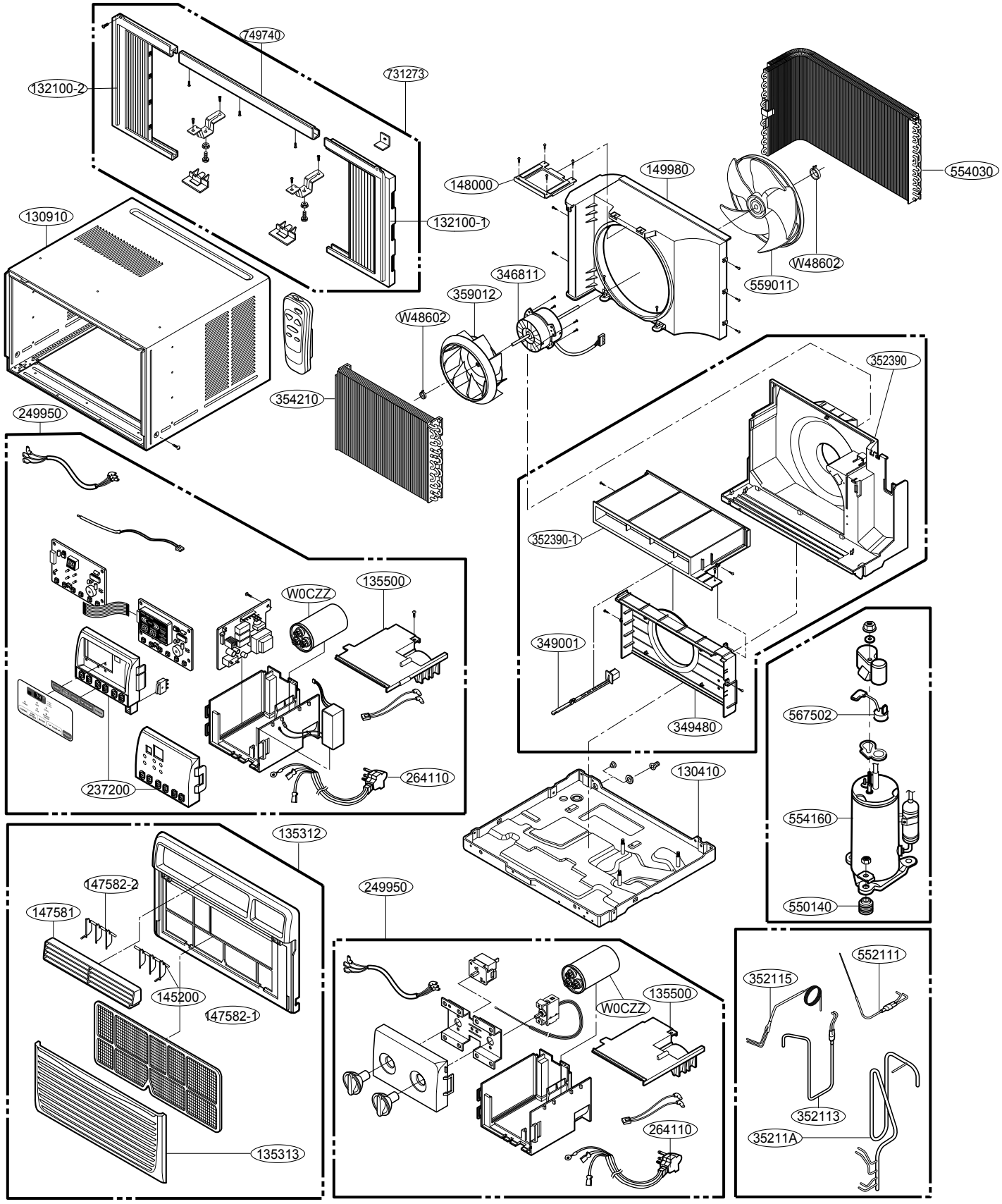

**MODEL: ZQ08C10,ZQ10C10**




S: Service Parts
N: Non Service Parts

| LOCATION NO. | DESCRIPTION | Q'TY PER SET | RE-MARKS |
|---|---|---|---|
| 1 | MOTOR ASSY | 1 | S |
| 2 | CAPACITOR | 1 | S |
| 3 | COMPRESSOR | 1 | S |
| 4 | OVERLOAD PROTECTOR | 1 | S |
| 5 | DC PCB ASSEMBLY | 1 | S |
| 6 | AC PCB ASSEMBLY | 1 | S |
| 7 | THERMISTOR | 1 | S |
| 8 | THERMOSTAT | 1 | S |
| 9 | ROTARY SWITCH | 1 | S |
| | | | |

# 5. EXPLODED VIEW



# 6. REPLACEMENT PARTS LIST

R: Service Parts
N: Non Service Parts

●ZQ08C10 ●ZQ10C10 ●CP08C10 ●CP12C10

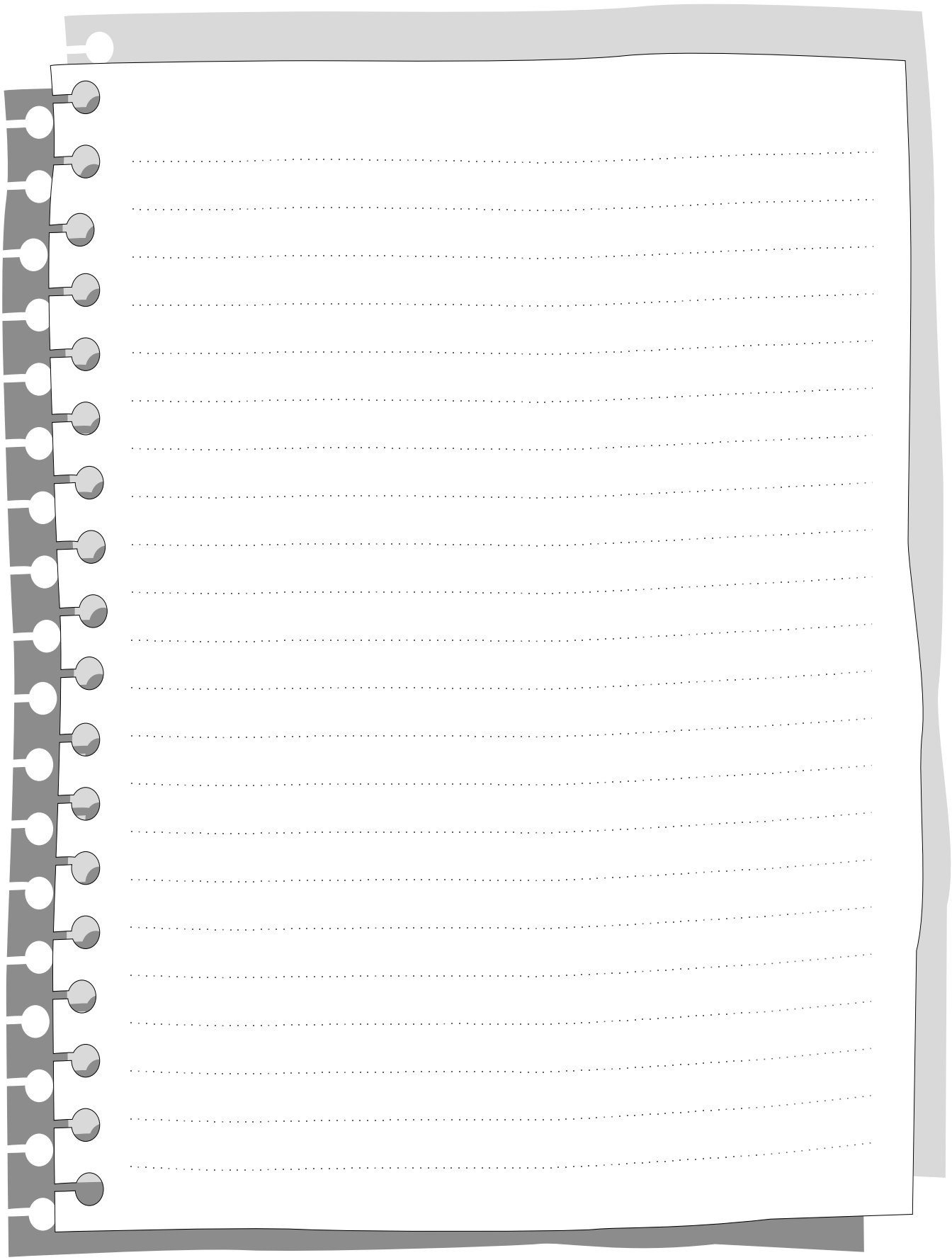
| LocNo | ZQ08C10 | CP08C10 | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 130410 | 67302924 | | Base Assy Single | R |
| 130910 | 67303711 | | Cabinet Assy Single | R |
| 135312 | 67306014 | | Grille Assy Front | R |
| 135313 | 67306109 | | Grille Assy Inlet | R |
| 135500 | 67300311 | | Cover | R |
| 145200 | 67304601 | | Link | R |
| 147582-1 | 67306260 | | Louver Vertical | R |
| 147582-2 | 67306261 | | Louver Vertical | R |
| 149410 | 67304105 | --- | Knob Assy | R |
| 149980 | 67303114 | | Shroud | R |
| 152302 | 67304306 | | Filter (Mech) | R |
| 238310 | --- | 67500116 | Escutcheon | R |
| 263230 | --- | 67307807 | Thermistor | R |
| 269310 | 67300402 | --- | Thermostat | R |
| 264110 | 67300021 | 67300021 | Power Cord Assy | R |
| 266003 | 67300501 | --- | Switch Rotary | R |
| 267110 | --- | 67307701 | Remote Controller | R |
| 268712 | --- | 67307613 | PWB(PCB) Assy Display | R |
| 268714 | --- | 67307614 | PWB(PCB) Assy Main | R |
| 346811 | 67303031 | 67303018 | Motor Assy Single | R |
| 349480 | 67303408 | | Orifice | R |
| 352390-1 | 67302731 | | Air Guide Assy Upper | R |
| 352390-2 | 67302718 | | Air Guide Assy Lower | R |
| 550140 | 67301901 | | Isolator Comp | R |
| 559011 | 67303201 | | Fan Blade | R |
| 359012 | 67302611 | | Fan Turbo | R |
| 567502 | 67301417 | 67301406 | O.L.P. | R |
| W0CZZ | 67300718 | 67300718 | Capacitor | R |
| W48602 | 67302500 | | Clamp Spring | R |
| 731373 | 67306309 | | stallation Kit w/Curtain | R |
| 749740 | 67304007 | | Upper Guide Cabinet | R |

| LocNo | CP10C10 | CP12C10 | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 130410 | 3041A20020X | 3041A20020J | Base Assy Single | R |
| 130910 | 3091A10071G | 3091A10071B | Cabinet Assy Single | R |
| 135312 | 3531A20098F | | Grille Assy Front | R |
| 135313 | 3530A11006A | | Grille Assy Inlet | R |
| 135500 | 3550UTL006A | | Cover | R |
| 145200 | 4520A20007A | | Link | R |
| 147582-1 | 4758A20041A | | Louver Vertical | R |
| 147582-2 | 4758A20041B | | Louver Vertical | R |
| 149980 | 4998A10016A | 4999A20001A | Shroud | R |
| 152302 | 5231A20007A | | Filter (Mech) | R |
| 238310 | 3831A10021N | | Escutcheon | R |
| 263230 | 6323A20004P | | Thermistor | R |
| 264110 | 6411A20056E | 6411A20056K | Power Cord Assy | R |
| 267110 | 6711A20103P | | Remote Controller | R |
| 268714 | 6871A20418E | | PWB(PCB) Assy Display | R |
| 268712 | 6871A20617R | | PWB(PCB) Assy Main | R |
| 346811 | 4681A30025A | 4681A20069K | Motor Assy Single | R |
| 349480 | 4948A10015A | | Orifice | R |
| 35211A | 5211A20441J | 5211A20228E | Tube Assy Suction | R |
| 352113 | 5211A10074S | 5211A21901A | Tube Assy Discharge | R |
| 352115 | 5421A20108C | 5421A20099D | Tube Assy Evaporator In | R |
| 352390-1 | 5239A20004A | | Air Guide Assy Upper | R |
| 352390-2 | 4974AR3262K | | Air Guide Assy Lower | R |
| 550140 | - | | Isolator Comp | R |
| 552111 | 5211A32004B | 5211AR3332W | Tube Assy Capillary | R |
| 554160 | 2520UCBK023 | 2520UCBK027 | Compressor | R |
| 559011 | 5900A10009B | | Fan Assy Axial | R |
| 359012 | 5900A20019C | | Fan Turbo | R |
| 567502 | 6750UL031A | 6750UL067A | O.L.P. | R |
| W0CZZ | 0CF1042856A | | Capacitor | R |
| W48602 | 3H02932B | | Clamp Spring | R |
| 132111-1 | 4959AR3402C | | Installation Kit w/Curtains L | R |
| 132111-2 | 4959AR3402D | | Installation Kit w/Curtains R | R |
| 749740 | 4974AR3262H | | Upper Guide Cabinet | R |

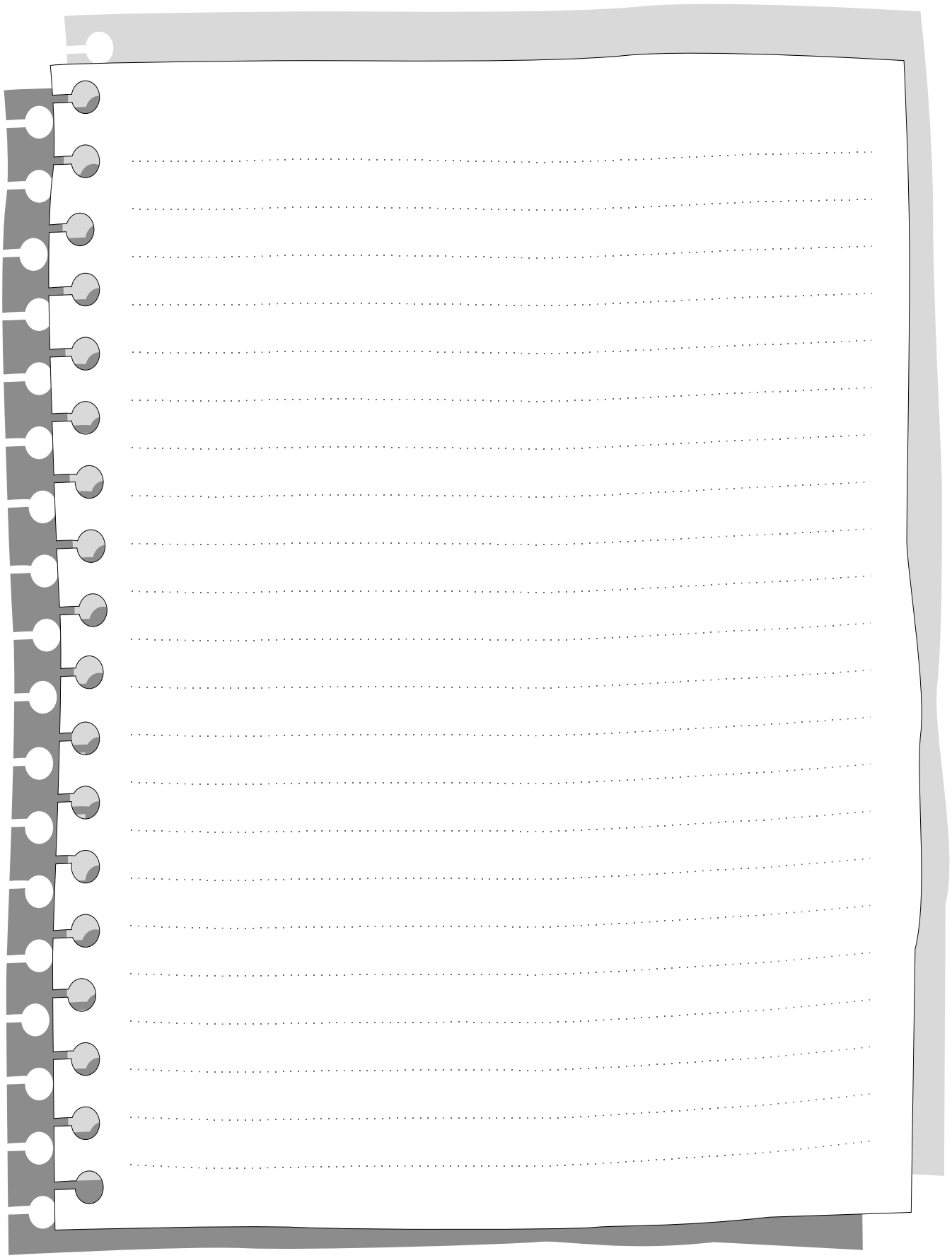
| LOCATION NO. | DESCRIPTION | P/NO |
|---|---|---|
| | | ZQ10C10 |
| 130410 | Base Assembly,Single | 3041A20021V |
| 352390-1 | Guide Assembly,Air | 5239A20012A |
| 359012 | Fan,Turbo | 5900A20020A |
| W48602 | Clamp,Spring | 3H02932B |
| 349480 | Orifice | 4948A10014A |
| 559011 | Fan Assembly,Axial | 5900AR1167B |
| 352390-2 | Guide Assembly,Air | 5239A20005B |
| 346811 | Motor Assembly,AC | 4681A20069N |
| 149980 | Shroud | 4998A10023C |
| 130910 | Cabinet Assembly,Single | 3091AR2317M |
| 135312 | Grille Assembly,Front | 3531A20119B |
| 135313 | Grille,Inlet | 3530A11005A |
| 159830 | Filter Assembly,Air Cleaner | 5231A20006A |
| 147582-1 | Louver,Vertical | 4758A20040A |
| 147582-2 | Louver,Vertical | 4758A20040B |
| 145200 | Link | 4520A20006A |
| 749740 | Guide | 4974AR3328B |
| 135500 | Cover | 3550A30194A |
| 266003 | Switch,Rotary | 2H00598E |
| 269310 | Thermostat | 2H01109L |
| W0CZZ | Capacitor,Film,Box | 2H01451M |
| 264110 | Power Cord Assembly | 6411A20056E |
| 149410 | Knob Assembly | 4941A30022A |
| 554160 | Compressor Set,China | TBZ30826701 |
| 567502 | Overload Protect | EAF36097201 |
| 550140 | Damper,Compressor | 4830AR4335B |
| 35211A | Tube Assembly,Suction | 5211A21786C |
| 352115 | Tube Assembly,Evaporator(In) | 5211A20470L |
| 352113 | Tube Assembly,Discharge | 5211A10074U |
| 552111 | Tube Assembly,Capillary | AJR32805501 |
| 132111-1 | Curtain Assembly | 4959AR3402A |
| 132111-2 | Curtain Assembly | 4959AR3402B |

| LOCATION NO. | DESCRIPTION | P/NO |
|---|---|---|
| | | CP08N10 |
| 130410 | Base Assembly,Single | 3041A20021V |
| 352390-1 | Guide Assembly,Air | 5239A20012A |
| 359012 | Fan,Turbo | 5900A20020A |
| W48602 | Clamp,Spring | 3H02932B |
| 349480 | Orifice | 4948A10014A |
| 559011 | Fan Assembly,Axial | 5900AR1167B |
| 148000 | Supporter | 4800A30002C |
| 352390-2 | Guide Assembly,Air | 5239A20005B |
| 349001 | Damper,Vent | 4900A20003A |
| 149980 | Shroud | 4998A10023C |
| 346811 | Motor Assembly,AC | 4681A20069G |
| 249950 | Case Assembly,Control | 4995A11014N |
| 237200 | Panel,Control | 3720A10111C |
| 268714 | PCB Assembly,Main | 6871A20617R |
| W0CZZ | Capacitor,Film,Box | 0CF1042856A |
| 268712 | PCB Assembly,Display | 6871A20418E |
| 266003 | Switch,Tact | 6600R000017 |
| 264110 | Power Cord Assembly | 6411A20056A |
| 263230 | Thermistor,NTC | 6323A20004P |
| 130910 | Cabinet Assembly,Single | 3091AR2317M |
| 135312 | Grille Assembly,Front | 3531A20119B |
| 135313 | Grille,Inlet | 3530A11005A |
| 159830 | Filter Assembly,Air Cleaner | 5231A20006A |
| 147581 | Louver,Horizontal | 4758A20019A |
| 147582-1 | Louver,Vertical | 4758A20040A |
| 147582-2 | Louver,Vertical | 4758A20040B |
| 145200 | Link | 4520A20006A |
| 749740 | Guide | 4974AR3328B |
| 731373 | Install Part Assembly,Single | 3127A10015B |
| 132111-1 | Curtain Assembly | 4959AR3402A |
| 132111-2 | Curtain Assembly | 4959AR3402B |
| 267110 | Remote Controller Assembly | 6711A20103P |
| 550140 | Compressor Set,China | 2520UCBA013 |
| 567502 | Overload Protect | 6750U3L018A |
| 135500 | Cover | 3550UTL006A |
| 554160 | Damper,Compressor | 4830AR4335A |
| 354210 | Evaporator Assembly,First | 5421A10026M |
| 35211A | Tube Assembly,Suction | 5211A20228Z |
| 352115 | Tube Assembly,Evaporator(In) | 5211A20559Q |
| 554030 | Condenser Assembly,First | 5403A20092G |
| 352113 | Tube Assembly,Discharge | 5211A20708G |
| 552111 | Tube Assembly,Capillary | 5211A30275N |

# MEMO



# MEMO



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