



**CONSUMER SERVICES TECHNICAL  
EDUCATION GROUP PRESENTS**

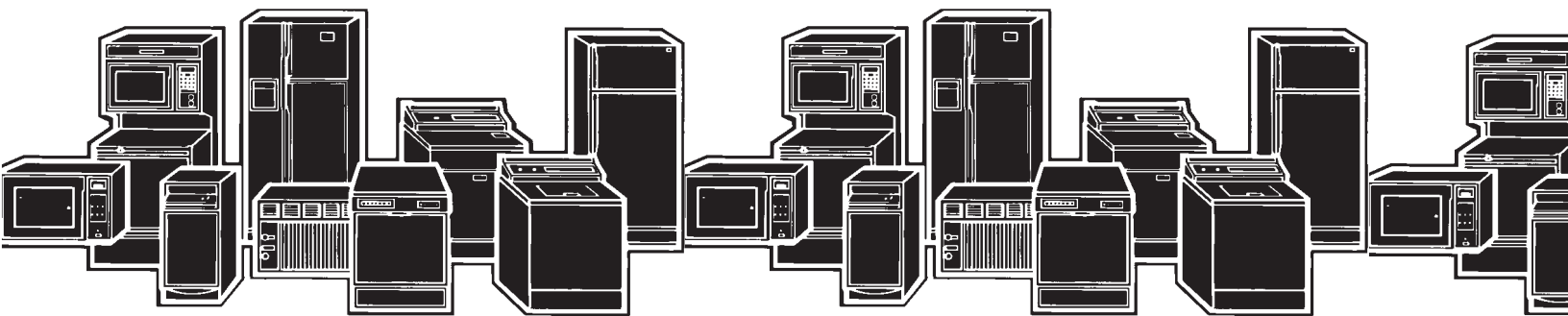
**R-100**

**10,000 BTU  
PORTABLE  
ROOM AIR  
CONDITIONER**



**Model ACP102PR**

**JOB AID  
Part No. 8178485**



## FORWARD

This Whirlpool Job Aid, “10,000 BTU Portable Room Air Conditioner” (Part No. 8178485), provides the technician with information on the installation, operation, and service of the 10,000 BTU Portable Room Air Conditioner. For specific information on the model being serviced, refer to the “Use and Care Guide,” or “Tech Sheet” provided with the air conditioner.

The Wiring Diagram used in this Job Aid is typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the unit.

## GOALS AND OBJECTIVES

The goal of this Job Aid is to provide information that will enable the service technician to properly diagnose malfunctions and repair the 10,000 BTU Portable Room Air Conditioner.

The objectives of this Job Aid are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the air conditioner to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than Authorized Service Technicians.

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— NOTES —

# GENERAL SAFETY FIRST

## Your safety and the safety of others is very important.

We have provided many important safety messages in this Job Aid and on the appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word “DANGER” or “WARNING.” These words mean:

 **DANGER**

**You can be killed or seriously injured if you don't immediately follow instructions.**

 **WARNING**

**You can be killed or seriously injured if you don't follow instructions.**

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

# WHIRLPOOL MODEL & SERIAL NUMBER DESIGNATIONS

## MODEL NUMBER

<b>MODEL NUMBER</b>	AC	P	10	2	P	R	0
AC = North America							
MAC = Mexico							
YAC = Canada							
<b>MODEL TYPE</b>							
D = Value model							
E = Heat & cool							
M = Value model							
P = Portable							
Q = Designer							
S = Sliding Window							
U = Thru The Wall							
<b>BTU CAPACITY</b>							
05 to 24, ie 10 = 10,000 BTU							
<b>ELECTRICAL CODE</b>							
2 = 115 Volt Standard							
4 = 230 Volt Standard							
8 = 115 Volt Energy Star							
9 = 230 Volt Energy Star							
<b>MANUFACTURING LOCATION</b>							
P = Purchased							
<b>YEAR OF INTRODUCTION</b>							
R = 2005							
<b>ENGINEERING CHANGE 0,1,2, ETC.</b>							

## SERIAL NUMBER

<b>SERIAL NUMBER</b>	QK	S	08	08012
<b>MANUFACTURING RESPONSIBILITY</b> QK = LaVergne, TN				
<b>YEAR OF PRODUCTION</b> S = 2005				
<b>WEEK OF PRODUCTION</b> 8th WEEK				
<b>PRODUCT SEQUENCE NUMBER</b>				

# MODEL & SERIAL NUMBER LABEL LOCATION

The Model/Serial Number label location is shown below.



# SPECIFICATIONS

## Operation Type

Cooling

## Dimensions

Indoor Unit

Height = 32-1/4" (820 mm)

Width = 17-3/4" (450 mm)

Depth = 16" (405 mm)

## Weight (Net)

Indoor Unit = 81.6 lbs. (37.0 kg)

## Electrical

Voltage = 115 VAC

Frequency = 60 Hz

## Refrigerant

Type: R22

Quantity: 23.3 oz.

## Cooling Capacity

10,000 BTU/h

## Working Temperature Range

Indoor = 64.4 / 90°F (18.0 / 32.0°C)



# WHIRLPOOL AIR CONDITIONER WARRANTY

## FIVE YEAR FULL WARRANTY

For five years from the date of purchase, when this air conditioner (excluding air filter) is installed, operated and maintained according to instructions attached to or furnished with the product, we at Whirlpool Corporation or Whirlpool Canada LP will repair or replace the product at our discretion to correct defects in materials or workmanship in the mechanical or electrical controls and in the sealed refrigeration system, including the compressor, evaporator, condenser, dry-strainer and connection tubing. Service must be provided by a Whirlpool designated service company.

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### 30 DAY LIMITED WARRANTY ON AIR FILTER

For 30 days from date of purchase, when this air conditioner is operated and maintained according to instructions attached to or furnished with the product, Whirlpool Corporation or Whirlpool Canada LP will pay for replacement air filter to correct defects in materials or workmanship.

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#### **Whirlpool Corporation or Whirlpool Canada LP will not pay for:**

1. Service calls to correct the installation of your air conditioner, instruct you on how to use your air conditioner, to replace house fuses or correct house wiring or reset circuit breakers, or to clean or replace owner accessible air filters.
  2. Repairs when your air conditioner is used in other than normal, single-family household use.
  3. Damage resulting from accident, alteration, misuse, abuse, fire, floods, acts of God, improper installation not in accordance with local electrical and plumbing codes, or use of products not approved by Whirlpool Corporation or Whirlpool Canada LP.
  4. Replacement parts or repair labor costs for units operated outside the United States or Canada.
  5. Pickup and delivery. Your air conditioner is designed to be repaired in the home.
  6. The removal and reinstallation of your air conditioner if it is installed in an overhead or other inaccessible location or is not installed in accordance with published installation instructions.
  7. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
  8. In Canada, travel or transportation expenses for customers who reside in remote areas.
- 

### **WHIRLPOOL CORPORATION AND WHIRLPOOL CANADA LP SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state and province to province.

**Outside the 50 United States and Canada, this warranty does not apply. Contact your authorized Whirlpool dealer to determine if another warranty applies.**

If you need service, first see "Troubleshooting" in the Use & Care Guide. Additional help can be found by checking "Assistance or Service," or by calling our Customer eXperience Center at **1-800-253-1301**, from anywhere in the U.S.A. or write: Whirlpool Corporation, Customer eXperience Center, 553 Benson Road, Benton Harbor, MI 49022-2692.

For service in Canada, call **1-800-807-6777**. Whirlpool Canada LP designated service technicians are trained to fulfill the product warranty and provide after-warranty service, anywhere in Canada. If you need further assistance, you can write to Whirlpool Canada LP with any questions or concerns at: Customer Interaction Center, Whirlpool Canada LP, 1901 Minnesota Court, Mississauga, Ontario L5N 3A7. Please include a daytime phone number in your correspondence.

— NOTES —

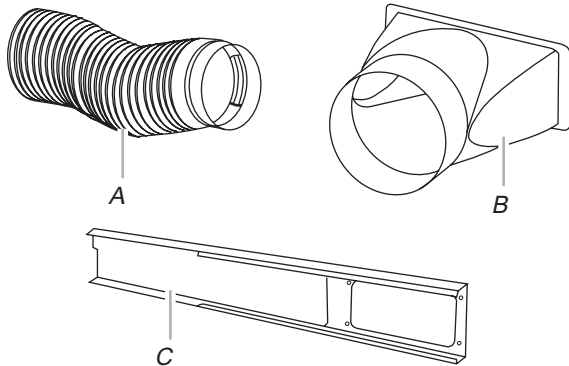
# INSTALLATION INFORMATION

## INSTALLATION REQUIREMENTS

### PARTS

#### Parts supplied

Check that all parts are included in parts package.

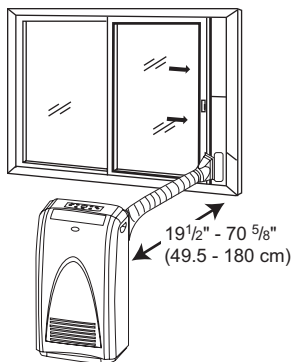


A. Flexible exhaust hose  
B. Window exhaust adapter  
C. Window slider kit (3)

### LOCATION REQUIREMENTS

#### NOTES:

- Locate the air conditioner between 19-1/2" (49.5 cm) and 70-5/8" (180 cm) from window or door.



- Keep the required distance from the return air outlet to the wall or other obstacles at least 19-1/2" (49.5 cm).
- Do not block air outlet.
- Provide easy access to grounded 3 prong outlet.

### ELECTRICAL REQUIREMENTS

⚠ WARNING

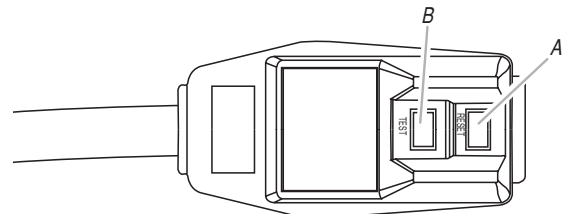
Electrical Shock Hazard

Plug into a grounded 3 prong outlet.  
Do not remove ground prong.  
Do not use an adapter.  
Do not use an extension cord.  
Failure to follow these instructions can result in death, fire, or electrical shock.

- The portable air conditioner should be connected to a 115 V, 60 Hz, 15- or 20-amp fused 3 prong grounded outlet.
- The use of a time-delay fuse or time-delay circuit breaker is recommended.
- All wiring must comply with local and national electrical codes and be installed by a qualified electrician. If you have any questions, contact a qualified electrician.

#### Power Supply Cord

**NOTE:** Your unit's device may differ from the one shown.



A. Reset button  
B. Test button

This room air conditioner is equipped with a power supply cord required by UL. This power supply cord contains state-of-the-art electronics that sense leakage current. If the cord is crushed, the electronics detect leakage current and power will be disconnected in a fraction of a second.

**To test your power supply cord:**

1. Plug power supply cord into a grounded 3 prong outlet.
2. Press RESET.
3. Press TEST (listen for click; Reset button will trip and pop out).
4. Press and release RESET (listen for click; Reset button will latch and remain in). The power supply cord is ready for operation.

**NOTES:**

- The Reset button must be pushed in for proper operation.
- The power supply cord must be replaced if it fails to trip when the test button is pressed or fails to reset.
- Do not use the power supply cord as an off/on switch. The power supply cord is designed as a protective device.
- A damaged power supply cord must be replaced with a new power supply cord obtained from the product manufacturer and must not be repaired.
- The power supply cord contains no user serviceable parts. Opening the tamper-resistant case voids all warranty and performance claims.

# INSTALLATION INSTRUCTIONS

## INSTALL PORTABLE AIR CONDITIONER

### **⚠ WARNING**

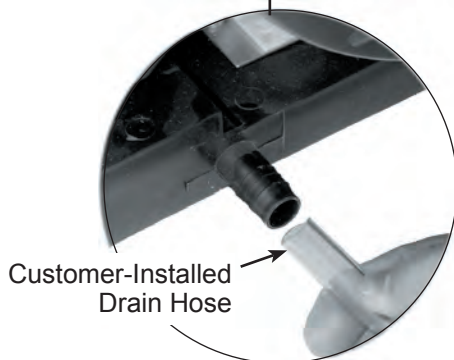
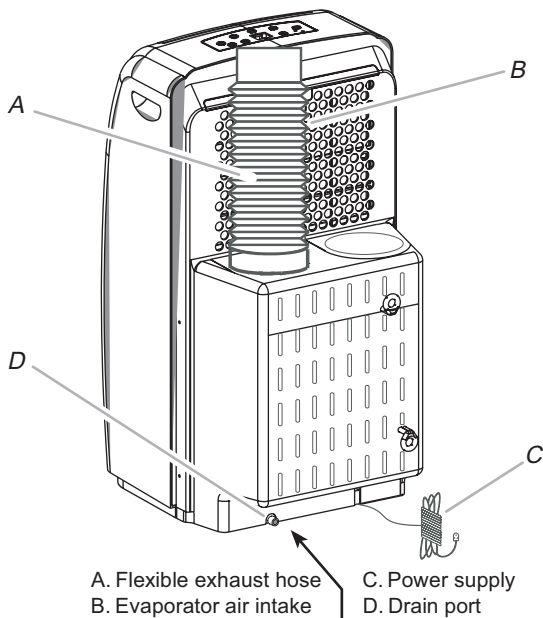
#### **Excessive Weight Hazard**

Use two or more people to move and install air conditioner.

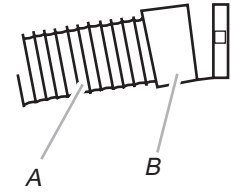
Failure to do so can result in back or other injury.

### Install Exhaust Hose And Adapter

1. Roll air conditioner to its selected location. See "Location Requirements."
2. Insert flexible exhaust hose into opening in back of air conditioner.
3. Twist clockwise to lock hose into place.



4. Attach window exhaust adapter to the flexible exhaust hose. Turn clockwise until securely locked into place.



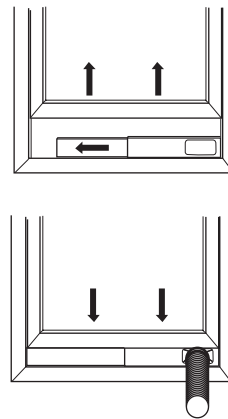
A. Flexible exhaust hose  
B. Window exhaust adapter

### Window Installation

The window slider kit has been designed to fit most standard vertical and horizontal window applications. However, it may be necessary for you to modify some aspects of the installation procedures for certain types of windows.

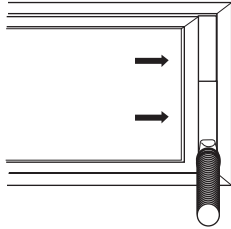
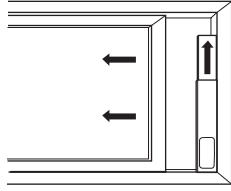
1. Open the window.
2. Place the window slider kit into the window, extending it to fit the width of the window.

#### Vertical Slide Window

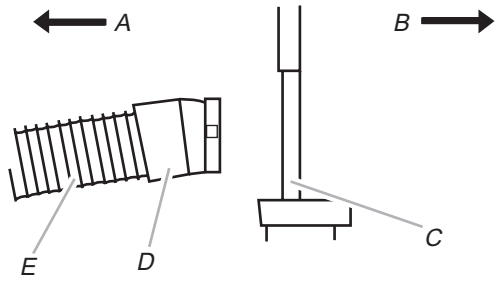


**NOTE:** For casement window installation, the window slider kit may be installed vertically with the window slider kit opening at the bottom.

### Horizontal Slide Window



3. Close the window onto the window slider kit to secure.
4. Insert the window exhaust adapter into the window slider kit.



- A. To air conditioner
- B. Outdoors
- C. Window slider kit

- D. Window exhaust adapter
- E. Flexible exhaust hose

# PRODUCT OPERATION

## THEORY OF OPERATION

### OPERATING MODES

The Whirlpool 10,000 BTU Portable Room Air Conditioner has five main operating modes and two modifiers:

Main Modes:

- Cooling
- ComfortMode™ Control
- RapidCool™
- Dry
- Fan Only

Modifiers:

- Auto Fan
- Swing Mode
- **Cooling Mode:** In the Cooling Mode the customer can adjust the temperature setting from 90°F to 64°F. The actual temperature will be displayed after the temperature adjustment has been made. The compressor and condenser fan motors cycle on or off together. They will cycle on when the room temperature is greater than 1°C, (approximately 2°F), away from the temperature set point and off at the same intervals below set point. High, Low, or Auto fan speed may be selected.
- **ComfortMode™ Control:** ComfortMode™ seeks to automatically cool the room to 73°F (23°C). If the room temperature is greater than 73°F, Cooling Mode will be used. If the room temperature is equal to or lower than 73°F, Dry Mode will be used. The default temperature may be increased or decreased by 4°F (2°C). Only the actual temperature will be displayed.
- **RapidCool™ Mode:** RapidCool™ Mode may only be selected using the remote control. This mode automatically runs the evaporator fan speed on high and the set point is set to 64°F (18°C).

- **Dry Mode:** The unit starts in the cooling mode for three minutes to determine the room air temperature at the thermistor. The control creates a set point 3°F (1.5°C) cooler than room temperature and then operates in the cooling mode with the evaporator fan operating at low speed. This 3°F (1.5°C) differential is needed to allow the compressor to run long enough to chill the evaporator. Set point temperature may be increased or decreased by 4°F (2°C). Only the actual temperature will be displayed.
- **Fan Only Mode:** In the fan only mode, only the evaporator fan motor will run. High, Low or Auto fan speed may be selected.
- **Auto Fan:** The speed will be set automatically based on room temperature. If the temperature is greater than 6°F (3°C) above set point, the fan will run on high speed until set point is reached.
- **Swing Mode:** When the unit is powered up in any of the five operating modes, the air louver motor opens the air louver to permit air from the evaporator to flow into the room. Holding the fan speed button for three seconds or pressing the Swing button on the remote will start the air door cycling up and down.

### CONDENSATE WATER MANAGEMENT

Condensate water from the evaporator drains down into a sump in the unit base. As the water level rises, the low water level switch closes, and the water pump begins to circulate the water to the top of the condenser. The water flows down over the warm condenser, and is evaporated. The water vapor is carried out the exhaust duct. If the high water level switch closes, the compressor and condenser fan motors shut off, and the water full indicator LED lights. The water must be drained manually.

## **COMPRESSOR PROTECTION**

The control protects the compressor by not allowing a compressor restart for 3 minutes. This delay will occur when moving through the operating modes with the remote or keypad or if there are rapid temperature changes at the thermistor.

## **DE-ICE PROTECTION**

A de-ice thermistor is mounted on the end of the evaporator in a tube brazed to the tubing loops. When the de-ice thermistor senses 25°F (-4°C) for a continuous 30 seconds, the compressor and condenser fan motors stop and a buzzer sounds. When the de-ice thermistor senses higher than 41°F (5°C), normal operation resumes.

## **FULL WATER WARNING**

When the high water level switch closes, the Water Full LED will flash and all operation will cease. The consumer must manually drain the sump by pulling the drain plug over a drain.

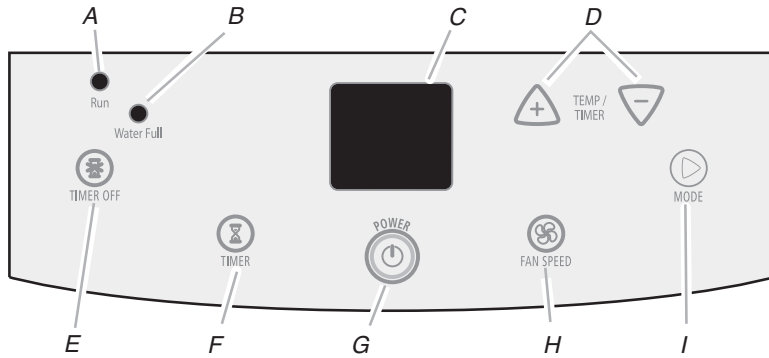
## **THERMISTOR FAILURE DEFAULT**

To provide some cooling operation in the event of a thermistor failure, the control will default to the following settings if a thermistor is determined to be shorted or open.

- Room temp thermistor is shorted or open; room temperature is set at 75°F (24°C).
- De-ice thermistor shorted or open; assume 100°F (38°C).



# PORTABLE AIR CONDITIONER USE



## NOTES:

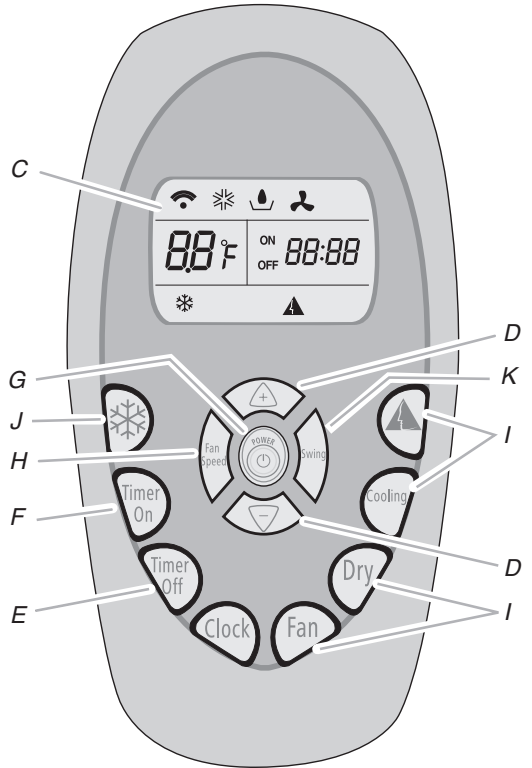
- Remote control may vary in appearance.
- Two AA batteries (not included) power the remote control. Do not use rechargeable batteries. Replace batteries after 6 months of use, or when the remote control starts to lose power.
- To operate the air conditioner with the remote control, aim the remote control at the signal receptor from no more than 23 ft (7 m) away.

A. RUN indicator light  
B. WATER FULL indicator light

E. TIMER OFF button  
F. TIMER on button

C. Display  
D. TEMP/TIME plus and minus buttons

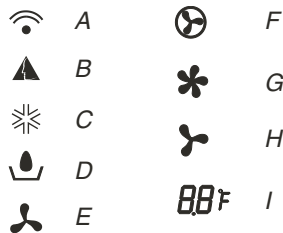
G. POWER button  
H. FAN SPEED button—choose Auto, High or Low



I. MODE button—choose ComfortMode™ control, Cooling, Dry or Fan Only  
J. RapidCool™ mode control  
K. SWING air direction control

## USING THE CONTROL PANEL

### Display Symbols



- |   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| A. Remote control signal transmit indicator light | D. Dry mode indicator light       | G. High fan speed indicator light |
| B. ComfortMode™ indicator light                   | E. Fan only mode indicator light  | H. Low fan speed indicator light  |
| C. Cooling mode indicator light                   | F. Auto fan speed indicator light | I. Display set temperature        |

## NOTES:

- The air conditioner display shows the current room temperature and 24 hour clock.
- In the event of a power failure, your air conditioner will operate at the previous settings when the power is restored.
- When changing modes while unit is operating, the compressor will stop for 3 to 5 minutes before restarting. If a button is pressed during this time, the compressor will not restart for another 3 to 5 minutes.
- In Cooling or Dry mode, the compressor and fan will stop when room temperature reaches set temperature.

## Mode

Press MODE to choose ComfortMode™ control, Cooling, Dry, or Fan Only.



### Cooling Mode

Cools the room. Temperature and fan speed are set by the user.

1. Press MODE to choose Cooling.
2. Choose fan speed. See “Fan Speed.”
3. Choose temperature. See “Temperature.”
4. Press POWER to start the air conditioner. The RUN indicator light will glow green.
5. When WATER FULL indicator light glows red, air conditioner will turn off automatically. See “Portable Air Conditioner Care” for directions on draining the air conditioner.

### Dry Mode

Dries the room. Temperature is set by user. Fan runs on Low only.

#### NOTES:

- Dry mode should not be used to cool the room.
  - Dry mode does not require hot air outlet hose.
1. Press MODE to choose Dry.
  2. Choose temperature. See “Temperature.”
  3. Press POWER to start the air conditioner. The RUN indicator light will glow green.
  4. When WATER FULL indicator light glows red, air conditioner will turn off automatically. See “Portable Air Conditioner Care” for directions on draining the air conditioner.

#### NOTES:

- Press the minus button once to decrease the set temperature by 2°F (1°C), or press twice to decrease set temperature by 4°F (2°C).
- Press the plus button once to increase the set temperature by 2°F (1°C), or press twice to increase set temperature by 4°F (2°C).

## ComfortMode™ Control

Air conditioner automatically selects cool or dry depending on room temperature. When in Dry mode, unit automatically selects fan speed and temperature. When in Cooling mode, unit automatically selects temperature, but fan speed may be selected by user.

1. Press MODE to choose ComfortMode™ control. Compressor and fan will start automatically based on room temperature. RUN indicator light will glow green and air swing will start.
2. During Cooling mode, fan speed may be changed. See “Fan Speed.”
3. When WATER FULL indicator light glows red, air conditioner will turn off automatically. See “Portable Air Conditioner Care” for directions on draining the air conditioner.

### NOTES:

- Press the minus button once to decrease the set temperature by 2°F (1°C), or press twice to decrease set temperature by 4°F (2°C).
- Press the plus button once to increase the set temperature by 2°F (1°C), or press twice to increase set temperature by 4°F (2°C).

## Fan Only Mode

Serves only to move air. Fan speed is set by user.

1. Press MODE to choose Fan Only.
2. Choose fan speed. See “Fan Speed.”
3. Press POWER to start the air conditioner. The RUN indicator light will glow green.

## Fan Speed

1. Press FAN to set the fan speed.
2. Choose Auto, High or Low.
  - Auto—Fan speed set automatically
  - High—Maximum cooling
  - Low—Minimum cooling



**NOTE:** Press and hold FAN SPEED for 3 seconds to change vertical airflow direction. Press and hold FAN SPEED for 3 seconds again to stop airflow louver at desired airflow direction.

## Temperature

1. Press the plus button to increase the temperature 2°F (1°C).



2. Press the minus button to decrease the temperature 2°F (1°C).



### NOTES:

- In the Cooling mode, the temperature can be set between 64°F (18°C) and 90°F (32°C).
- In Fan Only mode, the temperature cannot be set.
- To change the temperature display from °F to °C press and hold the plus and minus buttons for 3 seconds.

## Time Of Day

1. Press and hold TIMER and TIMER OFF. “12:00” will be displayed.
2. Press the plus or minus button to set the time (24 hour clock).



## Timer Delay

To set the Timer for a 1- to 24-hour delay until the air conditioner turns off (the air conditioner must be On):

1. Press TIMER OFF. Timer “OFF 00:00” indicator light will flash.



2. Press the plus or minus button to change the delay time (1 to 24 hours).
3. Press TIMER OFF again. Timer “OFF 00:00” indicator light will remain on.

To set the Timer to turn on the air conditioner, keeping previous settings:

1. Turn off air conditioner.
2. Press TIMER. Timer “ON 12:00” indicator light will flash.



3. Press the plus or minus button to change the delay time (1 to 24 hours).
4. Press TIMER again. Timer “ON 12:00” indicator light will remain on.

To set the Timer to turn on the air conditioner, changing the previous settings:

1. Turn off air conditioner.
2. Adjust Mode to ComfortMode™ control, Cooling, Dry or Fan Only.
3. For Cooling mode:
  - Adjust fan speed to High, Low or Auto.
  - Adjust temperature between 64°F (18°C) and 90°F (32°C).
4. For Fan Only mode, adjust fan speed to High or Low.
5. For ComfortMode™ control and Dry modes, adjust temperature up or down by 4°F (2.2°C).

**NOTE:** In Fan Only mode, temperature cannot be set.

6. Press TIMER. Timer “ON 12:00” indicator light will flash.
7. Press the plus or minus button to change delay time (1 to 24 hours).
8. Press TIMER again. Timer “ON 12:00” indicator light will remain on.

To clear Timer delay program:

**NOTE:** Air conditioner can be either on or off.

Press and hold TIMER OFF for 3 seconds. Timer indicator light will turn off.

To see or change the remaining time (in hours):

1. Press TIMER or TIMER OFF once after it has been programmed.
2. While the display is showing the remaining time, you can press the plus or minus button to increase or decrease the time.

## USING THE REMOTE CONTROL

### To turn the air conditioner on or off:

Press the power button.



### Mode

1. Press COOLING to cool the room.



2. Press DRY to remove moisture from the room without cooling.



**NOTE:** Dry operates on Low fan only. Fan Speed button will not operate in this mode.

3. Press FAN to run fan without cooling. Press FAN SPEED to choose High or Low.



### ComfortMode™ Control

1. Press ComfortMode™ control. The temperature and fan speed set automatically.



2. Press the up or down arrow button to increase or decrease the set temperature 4°F (2°C).
3. Press FAN SPEED to alternate between High and Low speeds each time Fan Speed is pressed.

### RapidCool™ Mode

Used for fast cooling. Automatically sets fan speed to high and temperature to 64°F (18°C).

**NOTE:** ComfortMode™ control button does not operate in RapidCool™ mode.

1. Press RapidCool™ mode. The temperature will automatically set to 64°F (18°C).



2. To turn RapidCool™ mode off, press either ComfortMode™ control, COOLING, DRY, FAN, the power button or the plus or minus buttons.

### Fan Speed (in Cooling or Fan Only modes only)

1. Press FAN SPEED.
2. Choose Auto, High or Low.



### Temperature

#### To raise the temperature:

Press the plus button to increase the temperature 2°F (1°C).



#### To lower the temperature:

Press the minus button to decrease the temperature 2°F (1°C).



### Time of Day

1. Press and hold CLOCK. "12:00" will be displayed.



2. Press the plus or minus button to set the time.

## Timer Delay

**To set the Timer for a 1- to 24-hour delay until the air conditioner turns off (the air conditioner must be On):**

1. Press TIMER OFF. Timer “OFF 00:00” indicator light will flash.



2. Press the plus or minus button to change the delay time (1 to 24 hours).
3. Press TIMER OFF again. Timer “OFF 00:00” indicator light will remain on.

**To set the Timer to turn on the air conditioner, keeping previous settings:**

1. Turn off air conditioner.
2. Press TIMER ON. Timer “ON 12:00” indicator light will flash.



3. Press the plus or minus button to change the delay time (1 to 24 hours).
4. Press TIMER ON again. Timer “ON 12:00” indicator light will remain on.

**To set the Timer to turn on the air conditioner, changing the previous settings:**

1. Turn off air conditioner.
2. Adjust Mode to ComfortMode™ control, Cooling, Dry, Fan or RapidCool™.
3. For Cooling:
  - Adjust fan speed to High, Low or Auto.
  - Adjust temperature between 64°F (18°C) and 90°F (32°C).
4. For Fan mode, adjust fan speed to High or Low.
5. For ComfortMode™ control and Dry modes, adjust temperature up or down by 4°F (2.2°C).

**NOTE:** In Fan mode, temperature cannot be set.

6. Press TIMER ON. Timer “ON 12:00” indicator light will flash.

7. Press the plus or minus button to change delay time (1 to 24 hours).
8. Press TIMER ON again. Timer “ON 12:00” indicator light will remain on.

**To clear Timer delay program:**

**NOTE:** Air conditioner can be either on or off. Press and hold TIMER OFF for 3 seconds. Timer indicator light will turn off.

**To see or change the remaining time (in hours):**

1. Press TIMER ON or TIMER OFF once after it has been programmed.
2. While the display is showing the remaining time, you can press the plus or minus button to increase or decrease the time.

**NOTE:** Timer On and Timer Off can be set at the same time.

## CHANGING AIR DIRECTION

Press SWING (on remote control only) once to change vertical airflow direction. Press again to stop airflow louver at desired airflow direction.



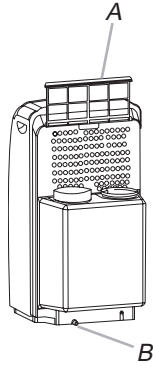
**NOTE:** On the control panel, press and hold FAN for 3 seconds to change vertical airflow direction. Press and hold FAN for 3 seconds again to stop airflow louver at desired airflow direction.

## NORMAL SOUNDS

When your air conditioner is operating normally, you may hear sounds such as:

- Droplets of water hitting the condenser, causing a pinging or clicking sound. The water droplets help cool the condenser.
- Air movement from the fan.
- Clicks from the thermostat cycle.
- Vibrations or noise due to poor wall or window construction.
- A high-pitched hum or pulsating noise caused by the modern high-efficiency compressor cycling on and off.

# PORTABLE AIR CONDITIONER CARE



A. Air filter  
B. Drain plug

## CLEANING THE AIR FILTER

1. Press POWER to turn off the air conditioner.
2. Remove the filter by sliding it up.
3. Use a vacuum cleaner to clean the air filter. If filter is very dirty, wash air filter in warm water with a mild detergent.

**NOTE:** Do not wash air filter in the dishwasher or use any chemical cleaners.

4. Air dry filter completely before replacing to ensure maximum efficiency.

## CLEANING THE OUTSIDE

1. Unplug air conditioner or disconnect power.
2. Remove the air filter and clean separately. See “Cleaning the Air Filter.”
3. Wipe outside of air conditioner with a soft, damp cloth.
4. Plug in air conditioner or reconnect power.
5. Press POWER to start the air conditioner.

## DRAINING THE AIR CONDITIONER

1. Press POWER to turn off the air conditioner.
2. Unplug air conditioner or disconnect power.
3. Move the air conditioner to a drain location or outside.
4. Remove the rubber drain plug and allow water to drain from the air conditioner.
5. Reinstall the drain plug.
6. Reposition air conditioner.
7. Plug in air conditioner or reconnect power.
8. Press POWER to start the air conditioner.

**NOTE:** A drain hose may also be connected to drain port to drain water from air conditioner. See “Install Portable Air Conditioner” on page 2-3 for location of drain port.

## STORING AFTER USE

1. Remove drain plug and drain water completely.
2. Run unit with fan only for approximately 12 hours to dry the unit.
3. Unplug unit.
4. Remove filter and clean. See “Cleaning the Air Filter.”
5. Clean the outside of air conditioner. See “Cleaning the Outside.”
6. Reinstall filter.
7. Remove batteries from remote control and store with unit in a clean, dry area.
8. Remove air hose and store with unit in a clean, dry area. See “Installation Instructions.”

# TROUBLESHOOTING

---

## Air conditioner will not operate

---

- **The power supply cord is unplugged.** Plug into a grounded 3 prong outlet. See “Electrical Requirements.”
- **The power supply cord has tripped (Reset button has popped out).** Press and release RESET (listen for click; Reset button will latch and remain in) to resume operation.
- **A household fuse has blown, or circuit breaker has tripped.** Replace the fuse, or reset the circuit breaker. See “Electrical Requirements.”
- **The Power button has not been pressed.** Press POWER.
- **The local power has failed.** Wait for power to be restored.

---

## Air conditioner blows fuses or trips circuit breakers

---

- **Too many appliances are being used on the same circuit.** Unplug or relocate appliances that share the same circuit.
- **Time-delay fuse or circuit breaker of the wrong capacity is being used.** Replace with a time-delay fuse or circuit breaker of the correct capacity. See “Electrical Requirements.”
- **An extension cord is being used.** Do not use an extension cord with this or any other appliance.
- **You are trying to restart the air conditioner too soon after turning air conditioner off.** Wait at least 3 minutes after turning air conditioner off before trying to restart the air conditioner.
- **You have changed modes.** Wait at least 3 minutes after turning air conditioner off before trying to restart the air conditioner.

---

## Air conditioner power supply cord trips (Reset button pops out)

---

- **Disturbances in your electrical current can trip (Reset button will pop out) the power supply cord.** Press and release RESET (listen for click; Reset button will latch and remain in) to resume operation.

- **An electrical overloading, overheating, pinching or aging can trip (Reset button will pop out) the power supply cord.** After correcting the problem, press and release RESET (listen for click; Reset button will latch and remain in) to resume operation.

**NOTE:** A damaged power supply cord must be replaced with a new power supply cord obtained from the product manufacturer and must not be repaired.

---

## Air conditioner seems to run too much

---

- **Is there a door or window open?** Keep doors and windows closed.
- **The current air conditioner replaced an older model.** The use of more efficient components may cause the air conditioner to run longer than an older model, but the total energy consumption will be less. Newer air conditioners do not emit the “blast” of cold air you may be accustomed to from older units, but this is not an indication of lesser cooling capacity or efficiency. Refer to the efficiency rating (EER) and capacity rating (in BTU/hr.) marked on the air conditioner.
- **The air conditioner is in a heavily occupied room, or heat-producing appliances are in use in the room.** Use exhaust vent fans while cooking or bathing and try not to use heat-producing appliances during the hottest part of the day. A higher capacity air conditioner may be required, depending on the size of the room being cooled.

---

## Air conditioner runs for a short time only, but room is not cool

---

- **Set temperature is close to room temperature.** Lower set temperature. See “Using the Control Panel.”



---

### Air conditioner runs, but does not cool

---

- **The filter is dirty or obstructed by debris.** Clean the filter.
- **Air outlet is blocked.** Clear air outlet.
- **Set temperature is too high.** Lower set temperature.
- **The air conditioner has lost charge (leak in system), or operated in temperatures below 64°F (18°C).** If the control buzzer beeps 3 times repeatedly, contact service technician.

---

### Air conditioner cycles on and off too much

---

- **The unit is set to ComfortMode™ control.** Use ComfortMode™ control only when you are away from home or asleep, since the fan does not circulate the room air continuously.
- **The air conditioner is not properly sized for your room.** Check the cooling capabilities of your portable air conditioner. Portable air conditioners are not designed to cool multiple rooms.
- **The filter is dirty or obstructed by debris.** Clean the filter.
- **There is excessive heat or moisture (open container cooking, showers, etc.) in the room.** Use a fan to exhaust heat or moisture from the room. Try not to use heat-producing appliances during the hottest part of the day.
- **The louvers are blocked.** Install the air conditioner in a location where the louvers are free from curtains, blinds, furniture, etc.
- **The outside temperature is below 64°F (18°C).** Do not try to operate your air conditioner in the cooling mode when the outside temperature is below 64°F (18°C).
- **The temperature of the room you are trying to cool is extremely hot.** Allow extra time for the air conditioner to cool off a very hot room.
- **Windows or doors to the outside are open.** Close all windows and doors.

---

### Temperature on display does not match room temperature

---

- **When the compressor and fan motor turn off during normal operations, or after you turn off the unit, a lower temperature reading than the actual room temperature may be displayed for a short period of time.** This lower temperature reading is caused by the temperature sensor being located close to the cold evaporator coil. The actual room temperature will display within a few minutes.

---

### Water drips from cabinet into your house

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- **The drain plug is not installed properly.** Install drain plug properly.

---

### Water Full indicator remains on, and the air conditioner turns off.

---

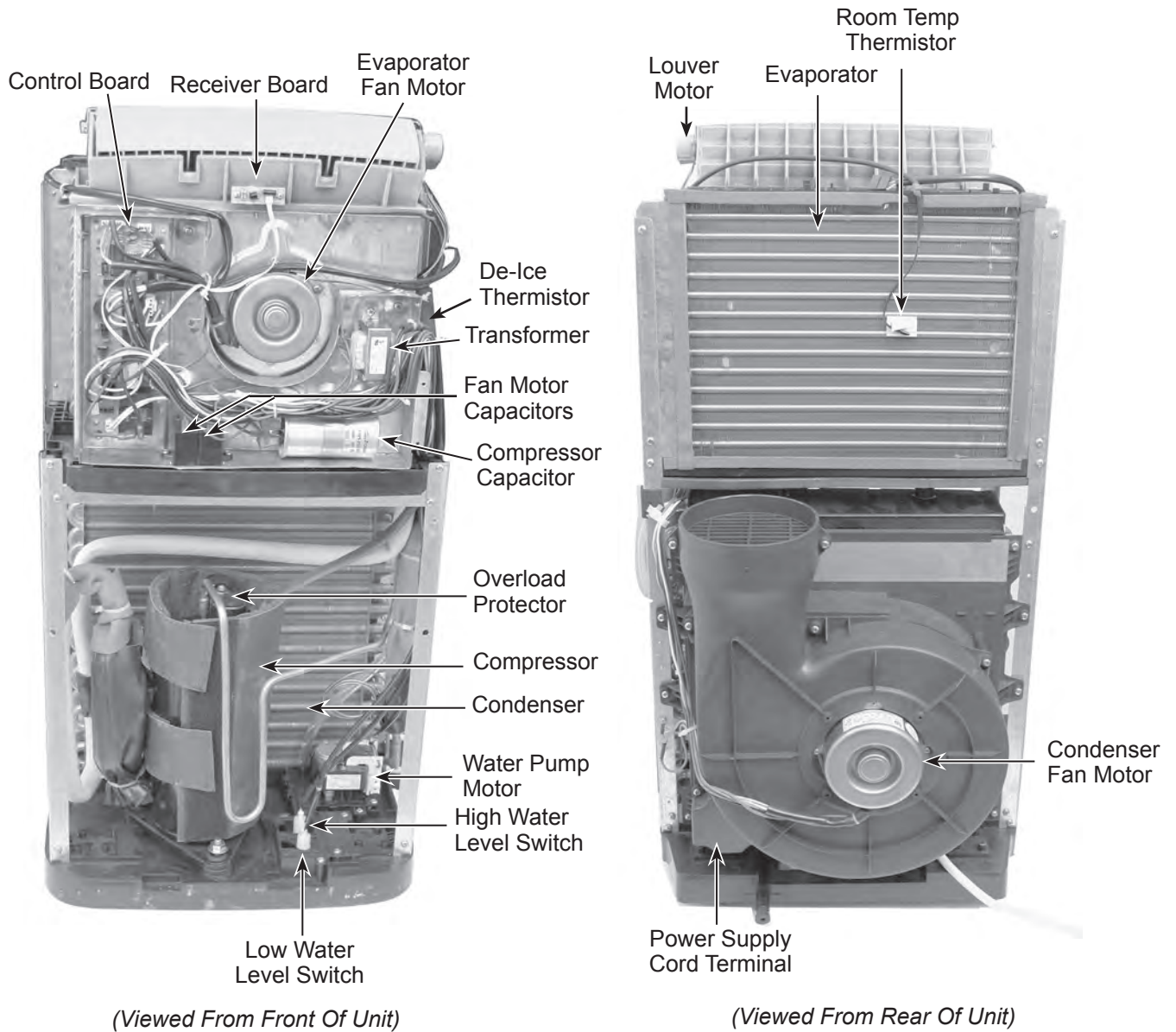
- **This is normal.** See “Portable Air Conditioner Care” for instructions on how to drain the air conditioner.

— NOTES —

# COMPONENT ACCESS

This section instructs you on how to service each component inside the 10,000 BTU Portable Room Air Conditioner. The components and their locations are shown below.

## COMPONENT LOCATIONS



Not Shown: User Interface Board

## REMOVING THE CABINET

**⚠ WARNING**



### Electrical Shock Hazard

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

1. Unplug air conditioner or disconnect power.
2. Disconnect the vent duct from the air conditioner by turning it counterclockwise and lifting it off the vent opening.



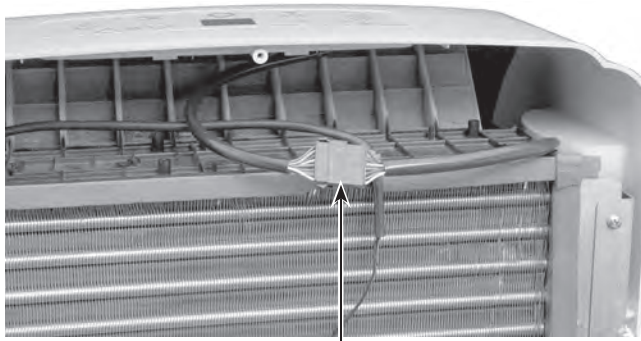
3. Remove the seven screws from the cabinet rear.



4. Pull the rear of the cabinet off the unit.



5. Disconnect the user interface connector from the main harness.



User Interface Connector

6. Unsnap the cabinet front tabs from the sides of the chassis, then lift the cabinet to clear the vent opening, and remove the cabinet from the unit.



Cabinet Front

3 Tabs

# REMOVING THE USER INTERFACE BOARD

## ⚠ WARNING



### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

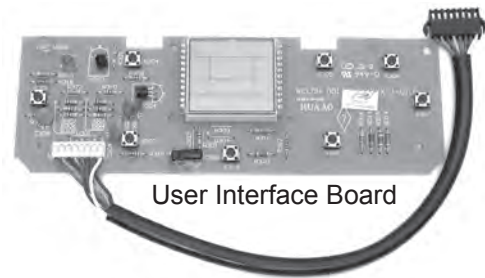
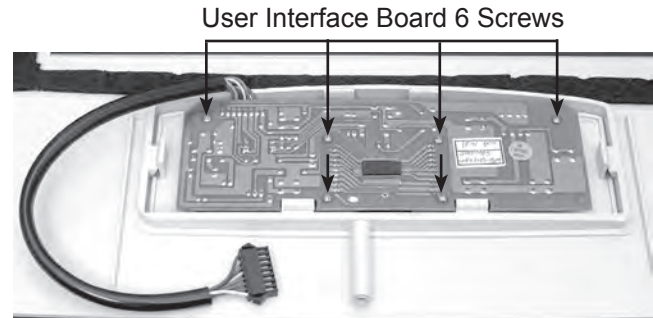
Failure to do so can result in death or electrical shock.

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Position the cabinet front upside down so the user interface board is accessible.



User Interface Board

4. Remove the six screws from the user interface board and remove the board from the cabinet front.



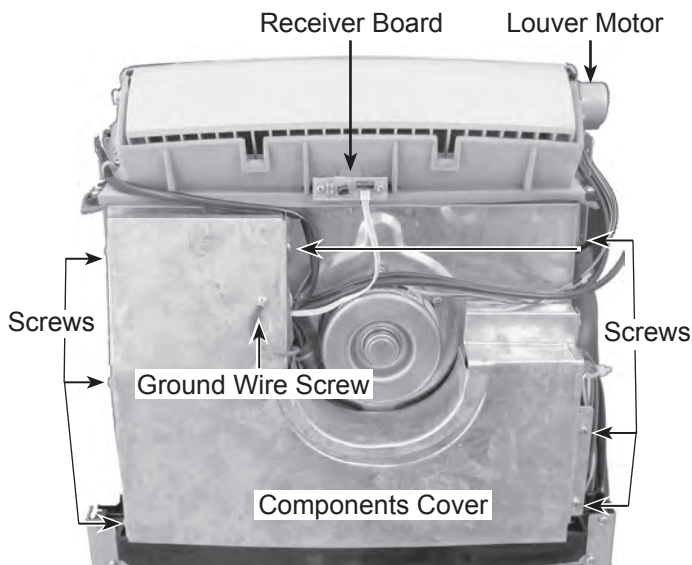
# REMOVING THE LOUVER MOTOR & RECEIVER BOARD

**⚠ WARNING**

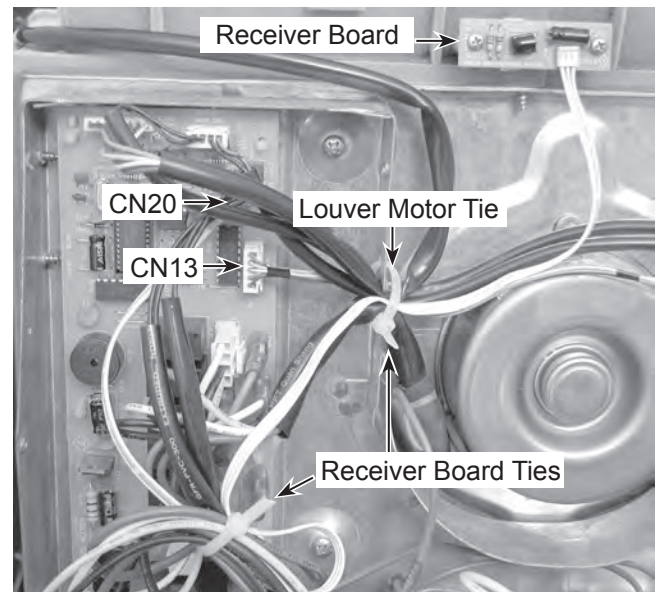


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

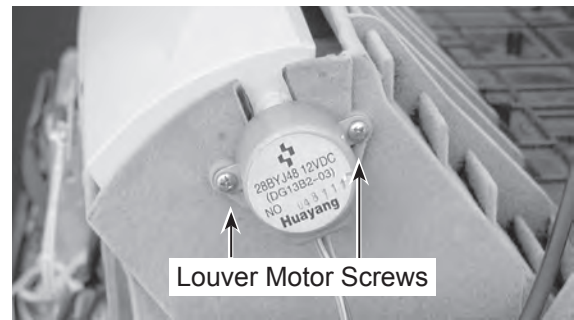
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the seven cover screws, and the green ground wire screw and lockwasher from the components cover, and remove the cover.



4. Cut the wire tie for the louver motor, or the two wire ties for the receiver board (see the top right photo).
5. **To remove the louver motor:**
  - a) Disconnect the motor wire connector CN13 from the control board.

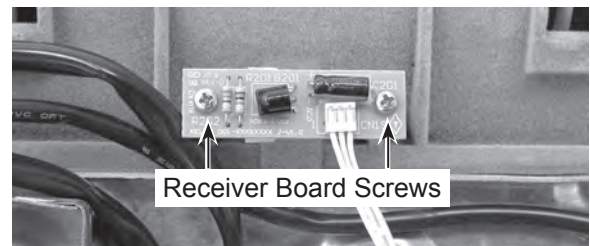


- b) Remove the two screws from the louver motor and remove the motor.



**6. To remove the receiver board:**

- a) Disconnect the board connector CN20 from the control board (see the top photo).
- b) Remove the two screws from the receiver board and remove the board.



**REASSEMBLY NOTE:** Be sure to replace the wire ties that you removed with new ties, and secure the wires neatly together.

# REMOVING THE CONTROL BOARD

**⚠ WARNING**



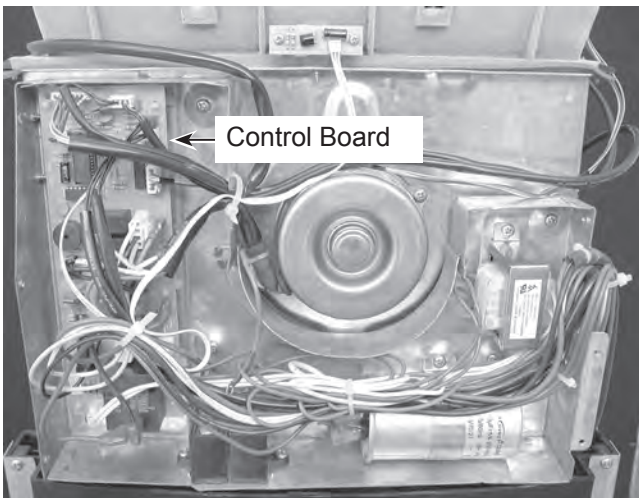
## Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

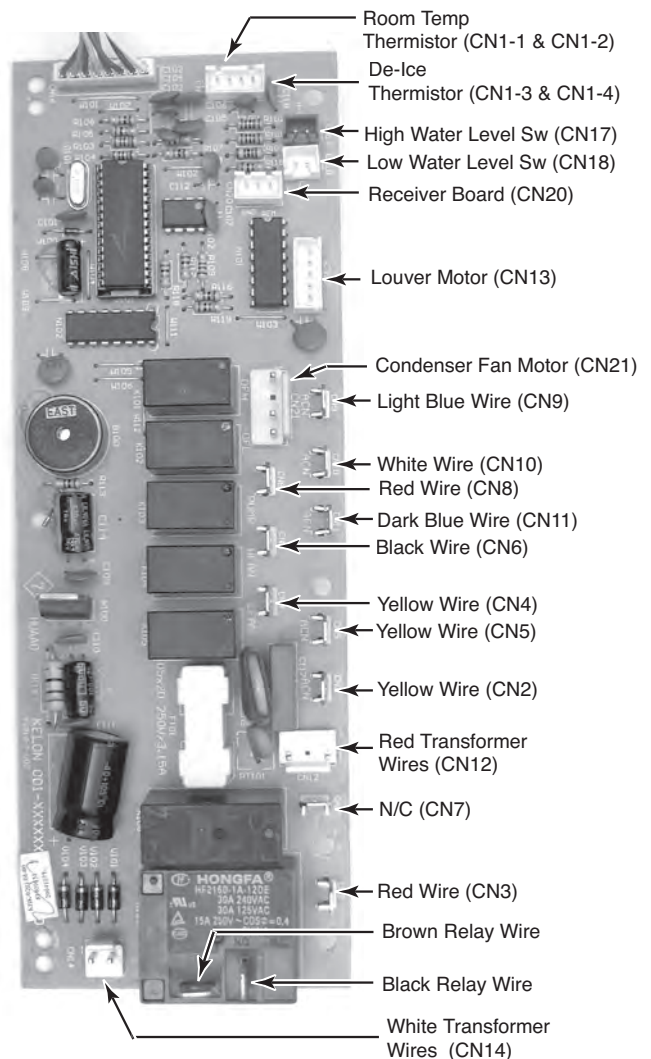
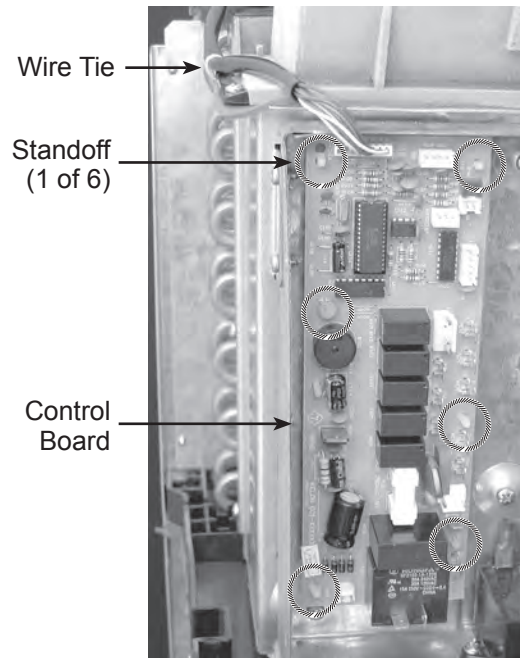
Failure to do so can result in death or electrical shock.

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).
4. Disconnect the wires from the control board and its components.



5. Cut the wire tie around the user interface board cable (see the top right photo).
6. Squeeze the tabs on the ends of the control board standoffs, and lift the board off the standoffs.


**REASSEMBLY NOTE:** Be sure to replace the wire tie that you removed with a new one, and secure the wires neatly to the chassis.





# REMOVING A FAN MOTOR CAPACITOR, COMPRESSOR MOTOR CAPACITOR, & TRANSFORMER

## ⚠ WARNING



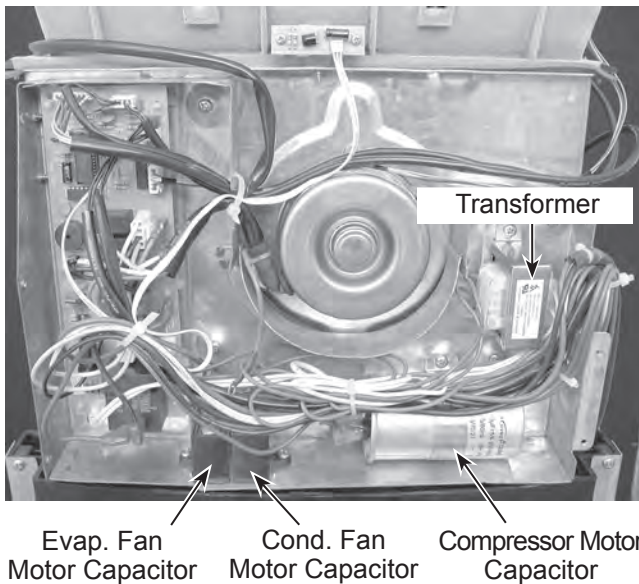
**Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

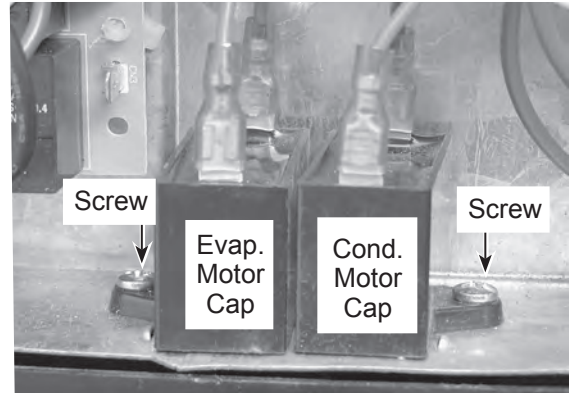
**Failure to do so can result in death or electrical shock.**

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).



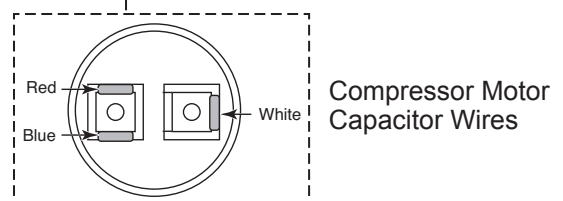
4. **To remove the evaporator or condenser fan motor capacitor:**
  - a) **CAUTION: Discharge the capacitor by touching the leads of a 20,000 ohm resistor to the motor capacitor terminals.**

- b) Disconnect the wires from the terminals of the evaporator or condenser fan motor capacitor.
- c) Remove the mounting screw from the capacitor, and remove the capacitor from the unit.



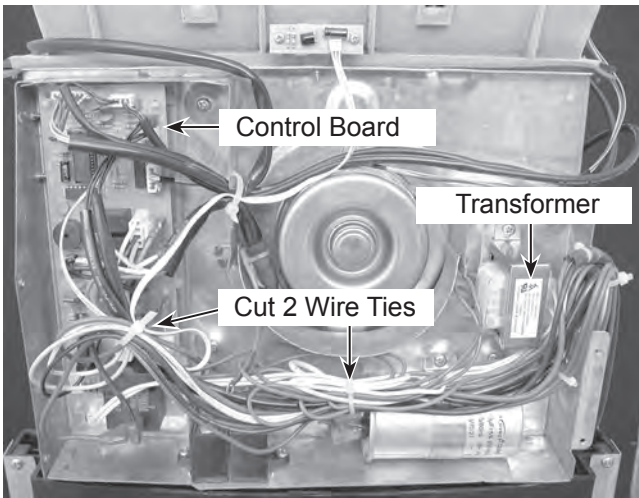
5. **To remove the compressor motor capacitor:**

- a) **CAUTION: Discharge the capacitor by touching the leads of a 20,000 ohm resistor to the motor capacitor terminals.**
- b) Remove the capacitor clamp screw and remove the capacitor from the clamp.
- c) Disconnect the three wires from the capacitor terminals.

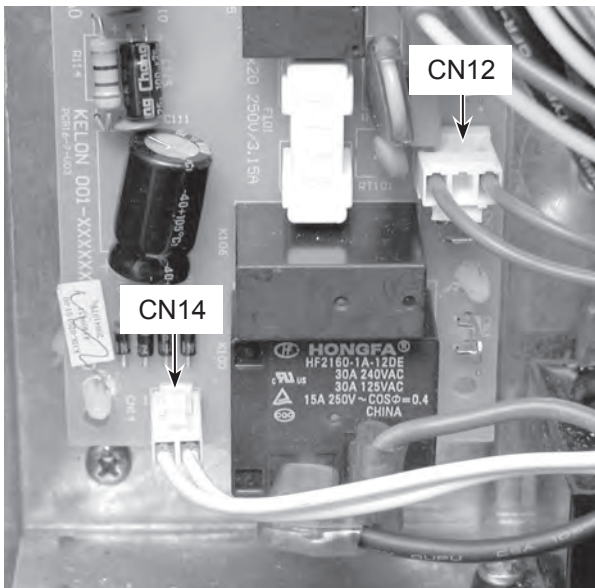


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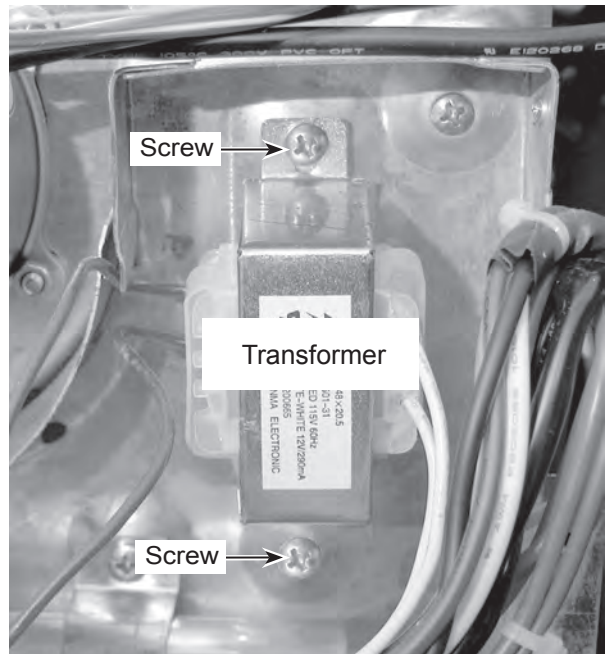
6. **To remove the transformer:**  
a) Cut the two wire ties shown below.



- b) Disconnect the transformer wire connectors CN12 (red wires) and CN14 (white wires) from the control board.



- c) Remove the two transformer screws and remove the transformer from the unit.



**REASSEMBLY NOTE:** Be sure to replace the wire ties that you removed with new ties, and secure the wires neatly together.

## REMOVING THE EVAPORATOR FAN MOTOR

**⚠ WARNING**



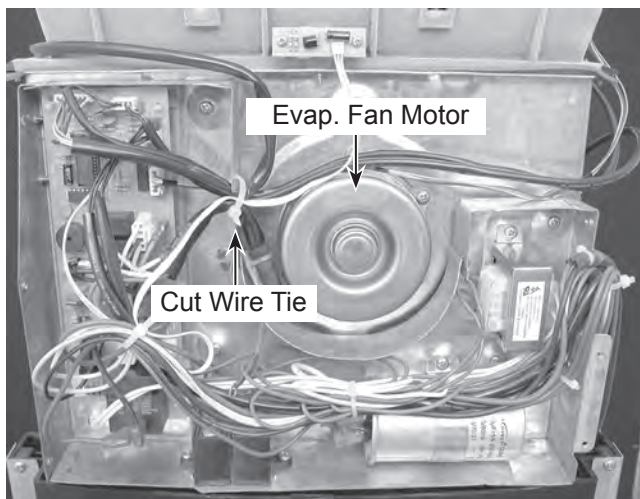
### Electrical Shock Hazard

**Disconnect power before servicing.**

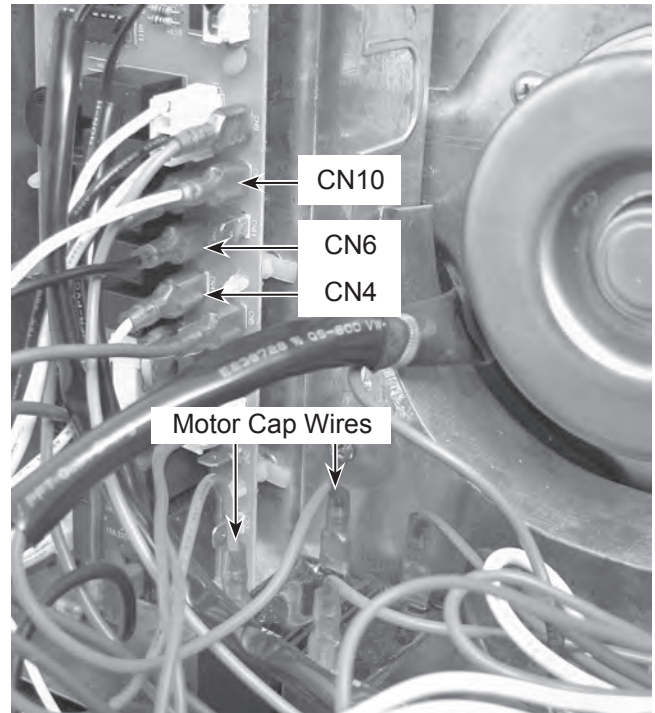
**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

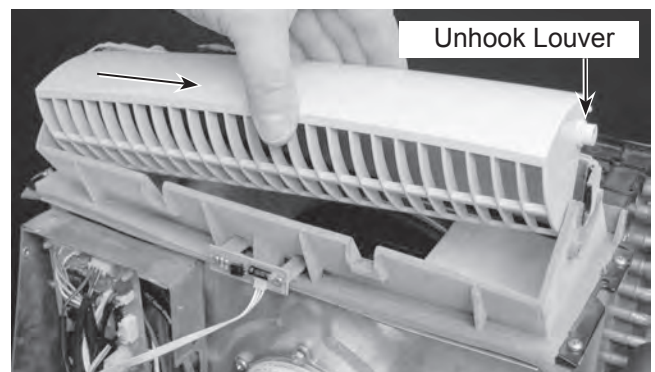
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).
4. Cut the indicated wire tie from around the evaporator fan motor wires.



5. Disconnect the evaporator fan motor wires from the following control board connectors:
  - a) White wire at CN10
  - b) Black wire at CN6
  - c) Yellow wire at CN4
6. Disconnect the two red wires from the evaporator fan motor capacitor terminals.

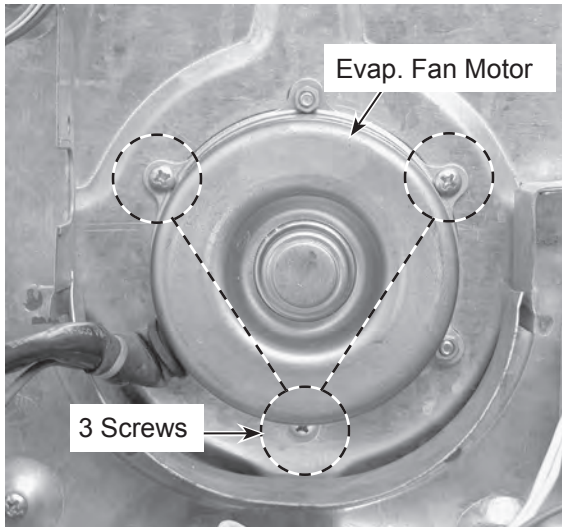


7. Remove the louver motor from the louver (see page 4-5 for the procedure).
8. Unhook the right end, pull the left end out of the housing hole, and remove the louver from the top of the unit.

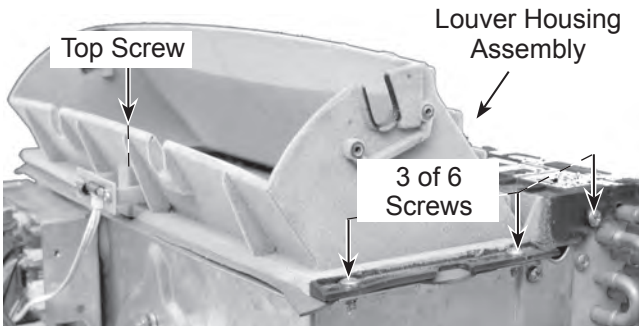


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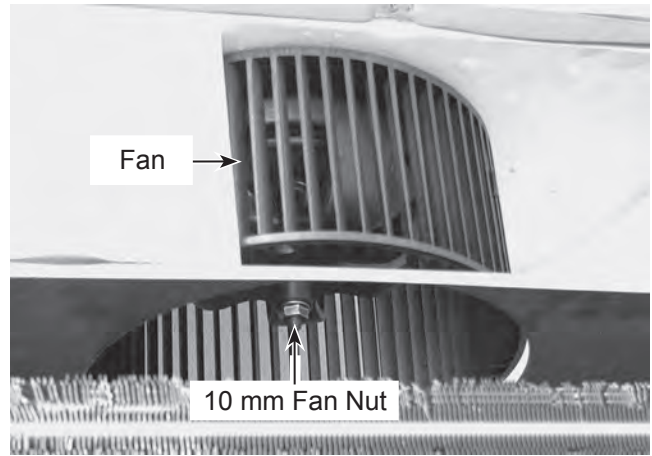
9. Remove the indicated three screws from the evaporator fan motor.



10. Remove the seven screws (three on each side and one on top) from the louver housing assembly, and lift the assembly off the top of the unit so that you can access the fan.



11. Remove the 10 mm fan nut from the fan motor shaft and remove the motor from the unit.



**REASSEMBLY NOTE:** Be sure to replace the wire tie that you removed with a new one, and secure the wires neatly to the chassis.

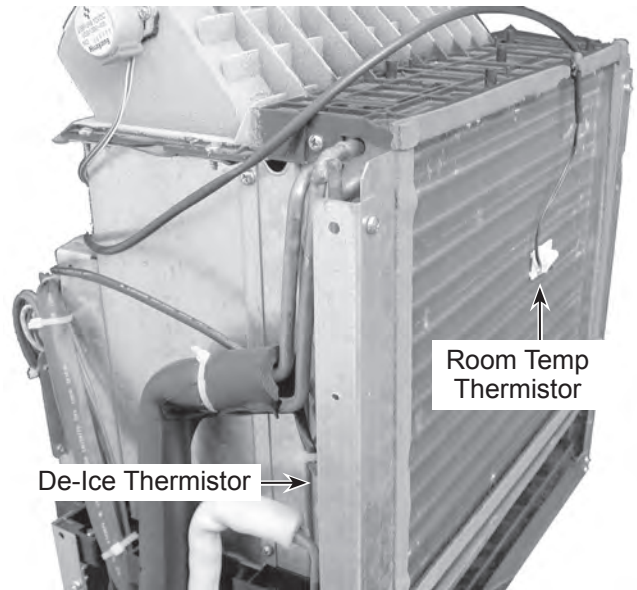
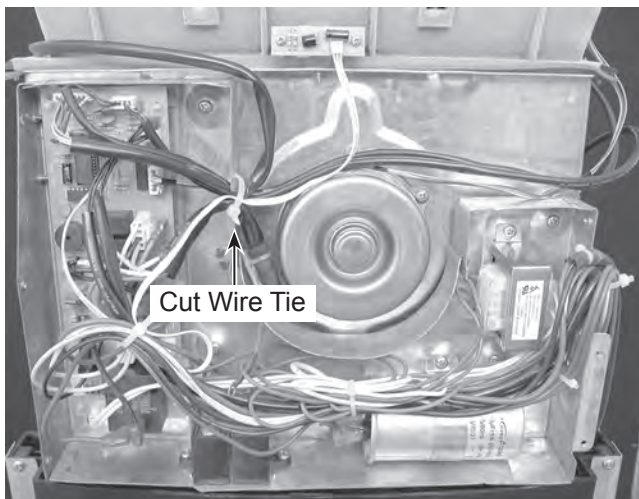
# REMOVING THE ROOM TEMP AND DE-ICE THERMISTORS

## ⚠ WARNING

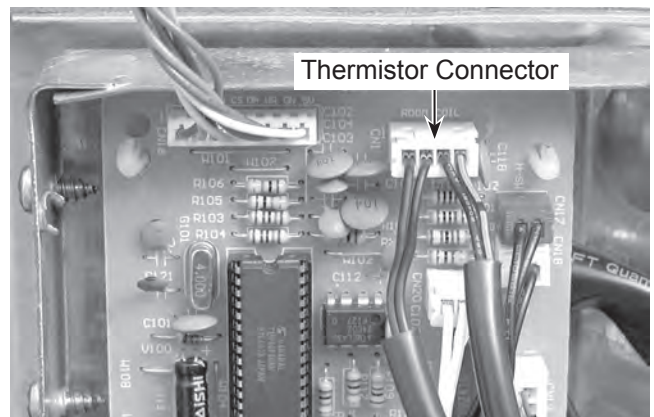


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).
4. Cut the indicated wire tie from around the wires.

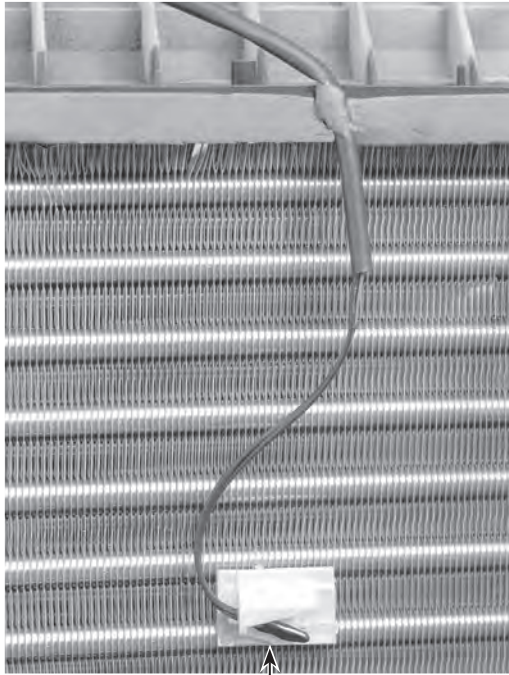


5. Disconnect the room temp and de-ice thermistor connector from the control board at CN1.



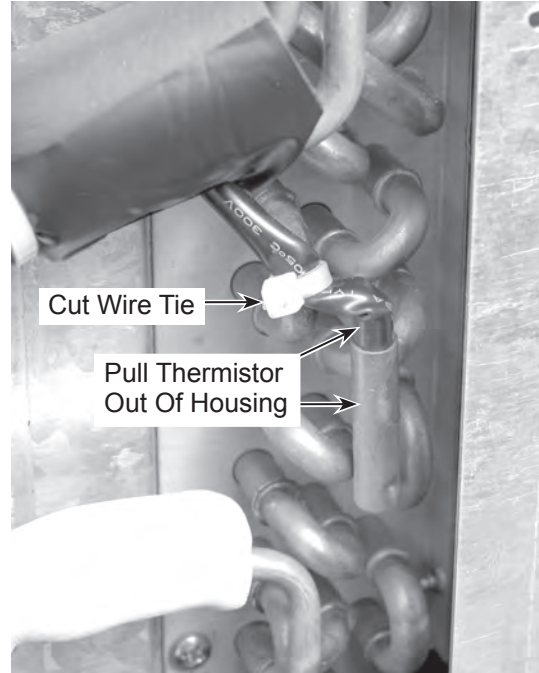
**Continued on the next page.**

6. **To remove the room temp thermistor,** unhook the wires and pull the thermistor off the evaporator clip.



Pull Thermistor Off Clip

7. **To remove the de-ice thermistor:**
- a) Cut the wire tie from around the evaporator tubing.
  - b) Pull the de-ice thermistor out of the evaporator housing.

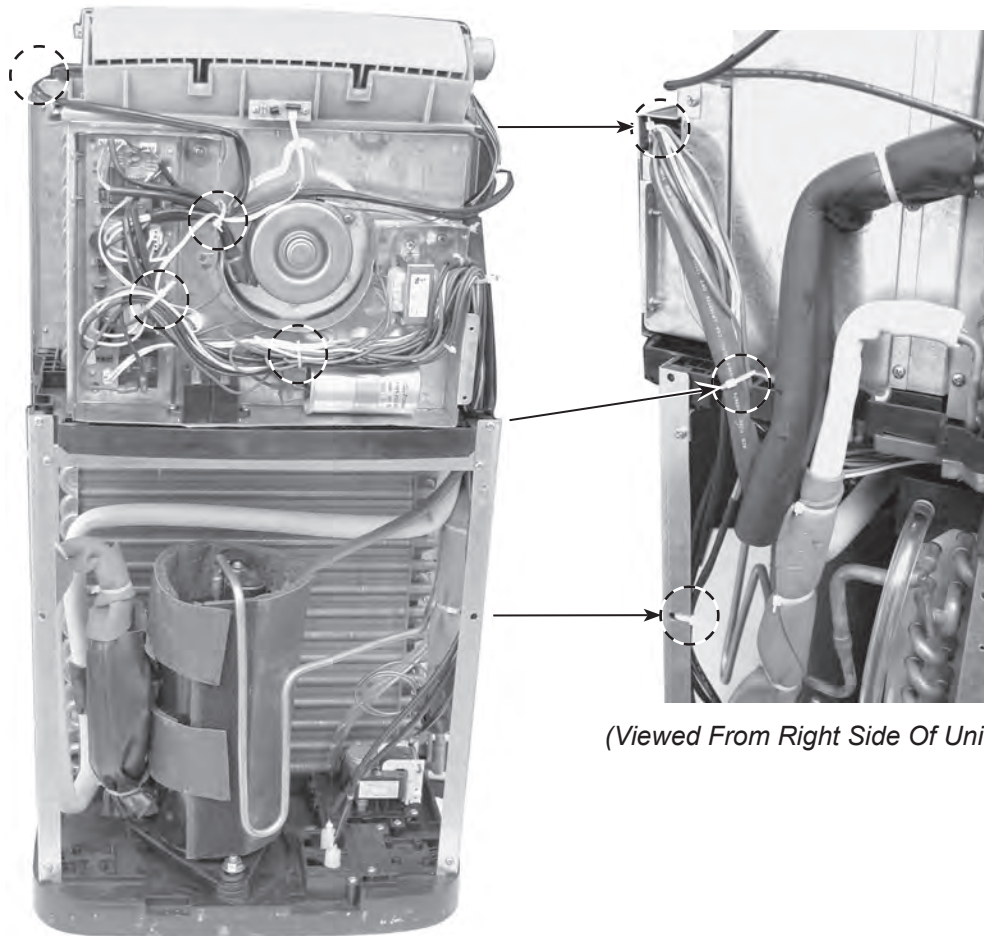


**REASSEMBLY NOTE:** Be sure to replace the wire ties that you removed with new ties, and secure the wires neatly together.

## WIRE TIE LOCATIONS

**NOTE:** The following photos show the locations (circled) of the various wire ties used in the rest of this section, and **are not** called out in the procedures. The wire ties will need to

be replaced to secure the wiring for the component being serviced. Always route the wires as shown in the photos, and keep them neat to avoid vibration noise.



*(Viewed From Front Of Unit)*

*(Viewed From Right Side Of Unit)*

## REMOVING THE WATER PUMP MOTOR

### ⚠ WARNING



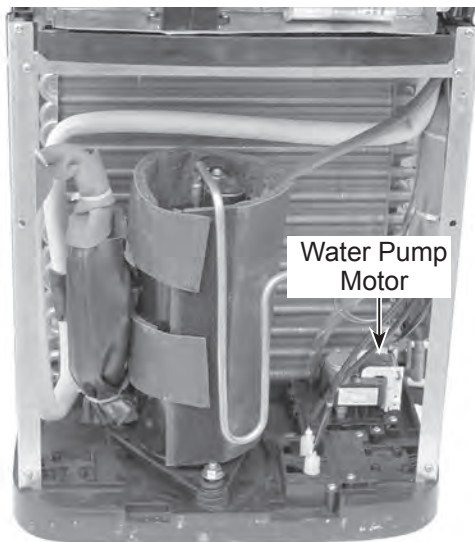
#### Electrical Shock Hazard

Disconnect power before servicing.

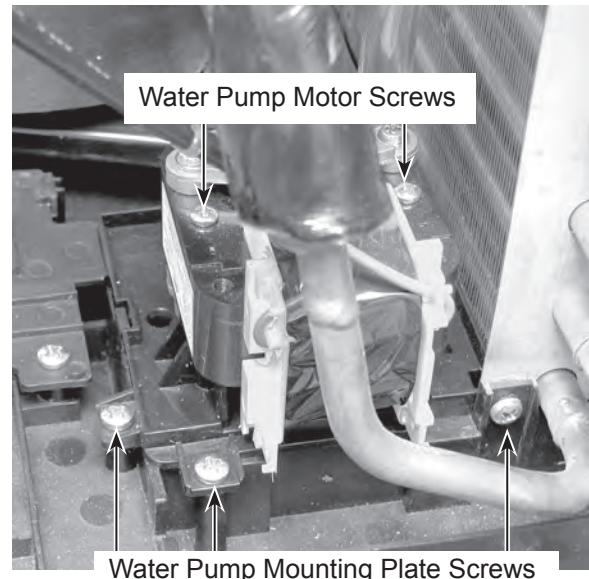
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

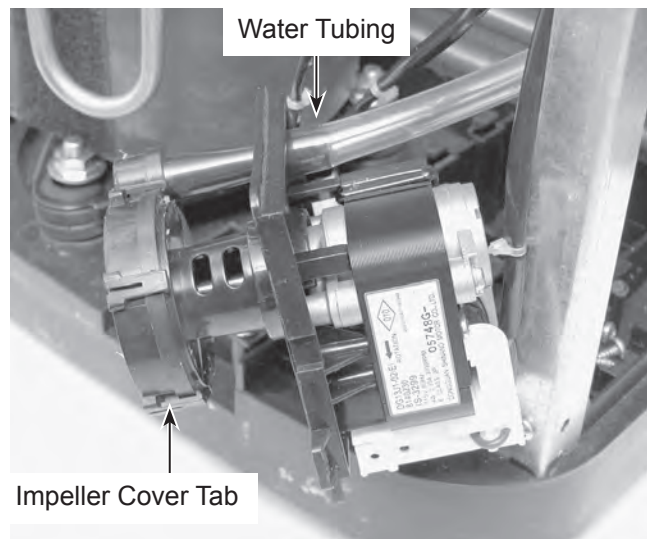
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).



4. Remove the two screws from the water pump motor (see the top right photo).
5. Remove the three screws from the water pump mounting plate and lift the pump off the housing.

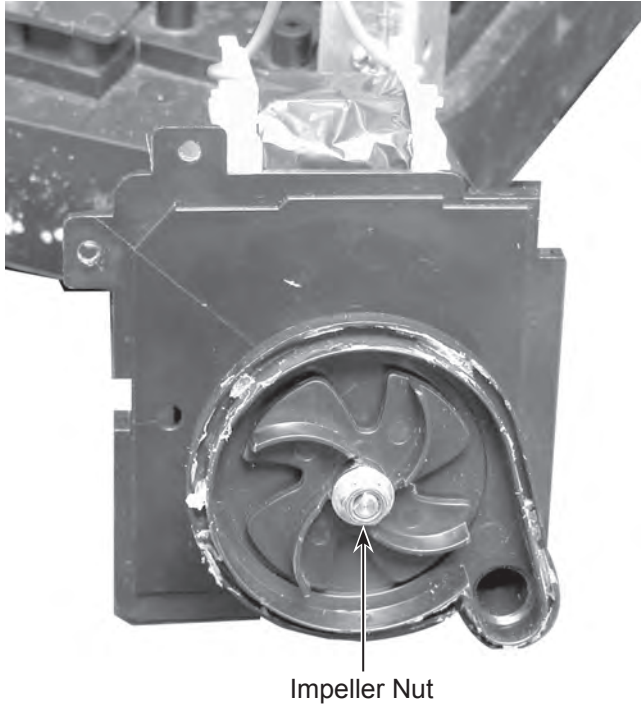


6. Pry the end of the water tubing off the water pump mounting plate connector.
7. Unclip the five locking tabs from the impeller cover, and remove the cover from the pump.

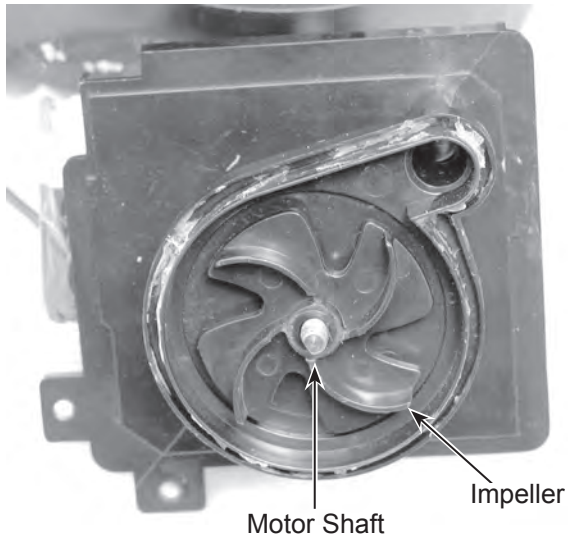




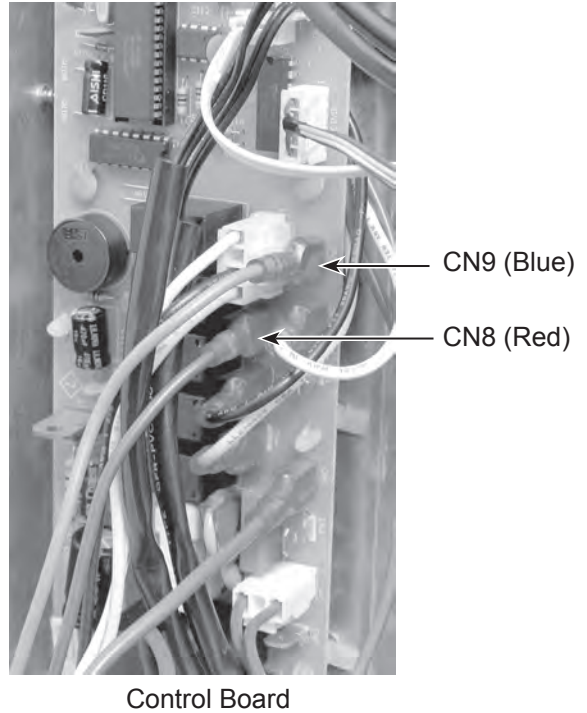
8. Remove the 5/16" nut from the impeller and remove the impeller from the motor shaft. **NOTE:** The thread is right-rotation.



9. Use a hammer, and tap the end of the motor shaft to remove the water pump motor from the impeller and housing.



10. Cut the necessary wire ties to remove the blue and red motor wires from the chassis.
11. Disconnect the motor wires from the control board terminals CN8 (red) and CN9 (blue).



**REASSEMBLY NOTE:** Be sure to replace all of the wire ties that you removed with new ties, (see page 4-13 for the locations), and secure the wires neatly together.

# REMOVING THE HIGH & LOW WATER LEVEL SWITCHES

## ⚠ WARNING



### Electrical Shock Hazard

Disconnect power before servicing.

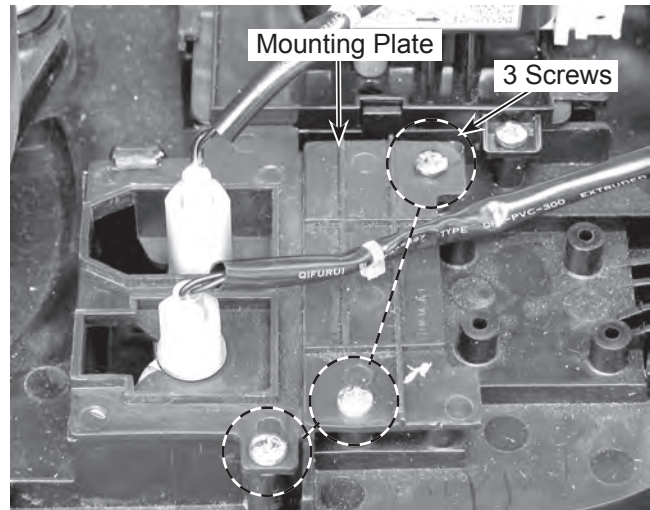
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

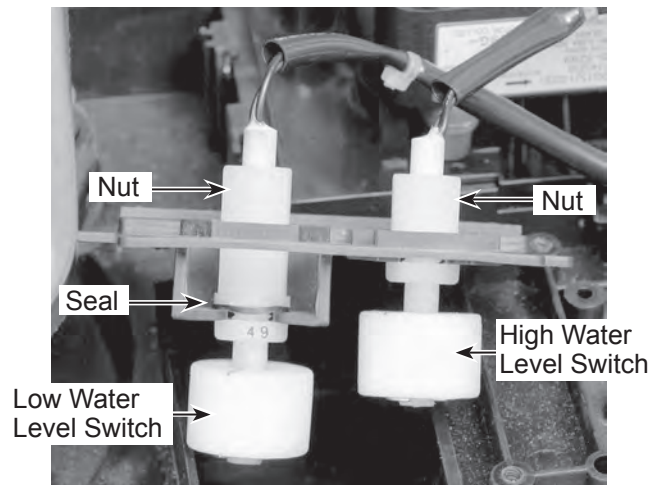
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).



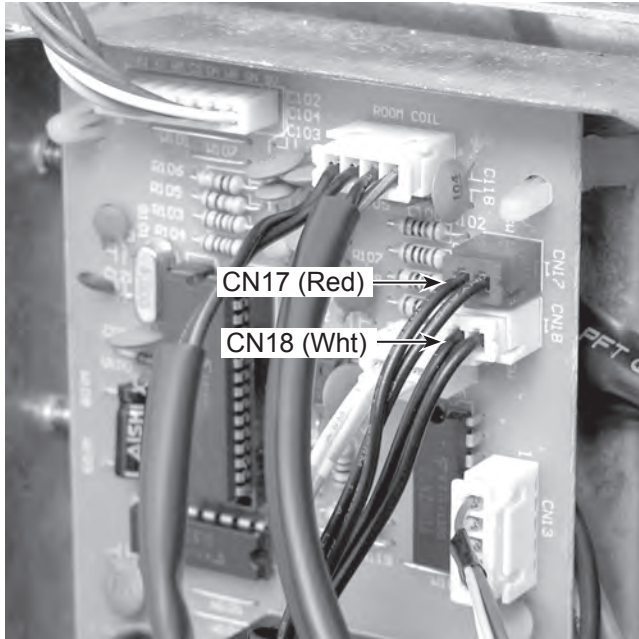
4. Remove the three screws from the water level switch mounting plate and remove the plate and switches (see the top right photo).



5. Loosen the nut from the water level switch you are servicing, and slide the switch off the plate. **IMPORTANT NOTE:** Make sure that you position the rubber seal on the switch so it is between the bottom of the nut and the top of the mounting plate when you install the switch.



6. Cut the necessary wire ties to remove the high and low water level switch wires from the chassis.
7. Disconnect the high water level switch connector from the control board at CN17 (red), or the low water level switch at CN18 (white).



8. Pull the water level switch wire through the mounting plate and remove the switch.



**REASSEMBLY NOTE:** Be sure to replace all of the wire ties that you removed with new ties, (see page 4-13 for the locations), and secure the wires neatly together.

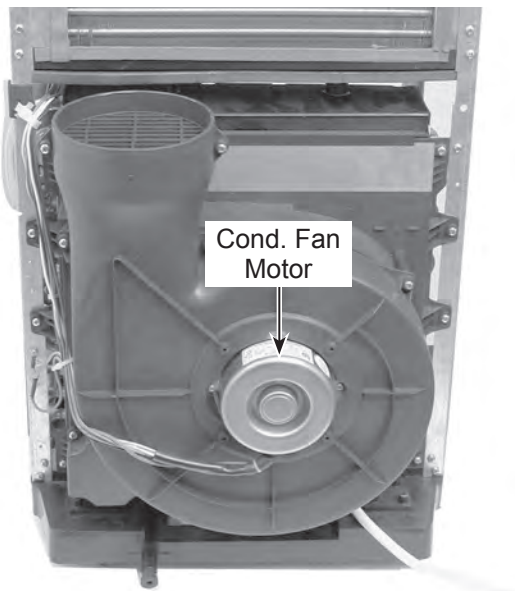
## REMOVING THE CONDENSER FAN MOTOR

### ⚠ WARNING

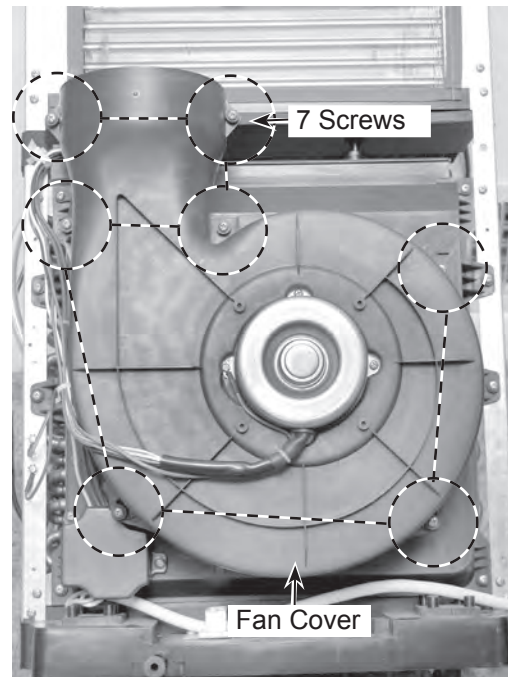


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

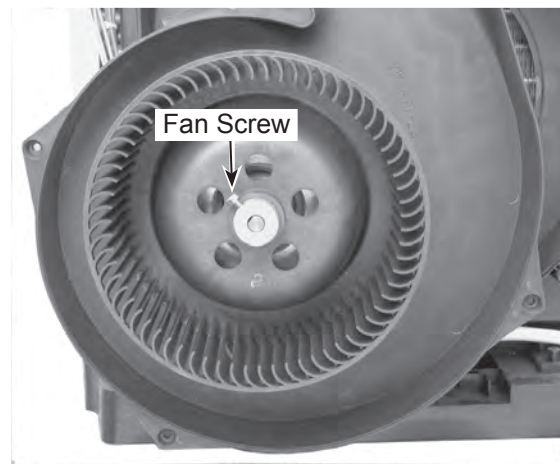
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).



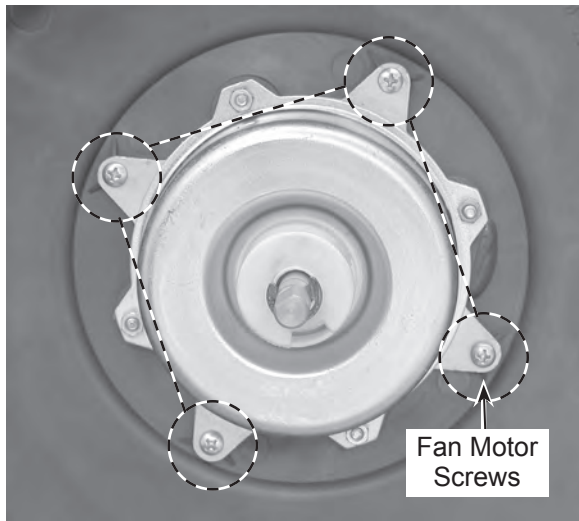
4. Remove the 7 screws from the fan motor cover and remove the cover.



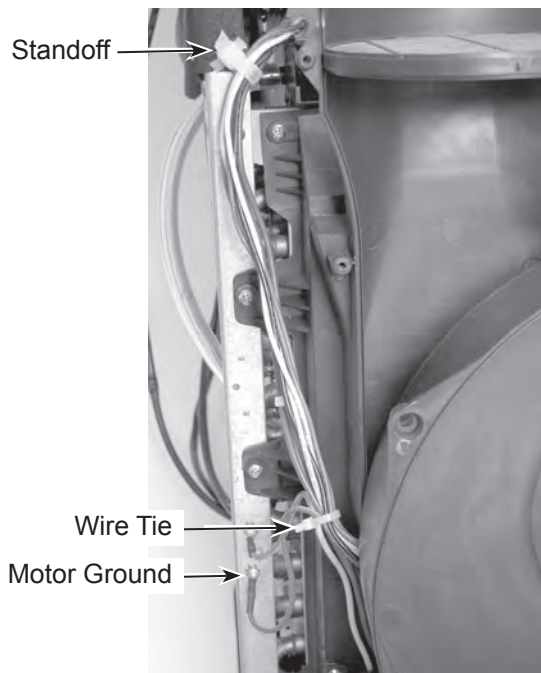
5. Loosen the 5/16" hex-head fan screw on the condenser fan motor, and pull the fan off the motor shaft.



6. Remove the four screws from the condenser fan motor.

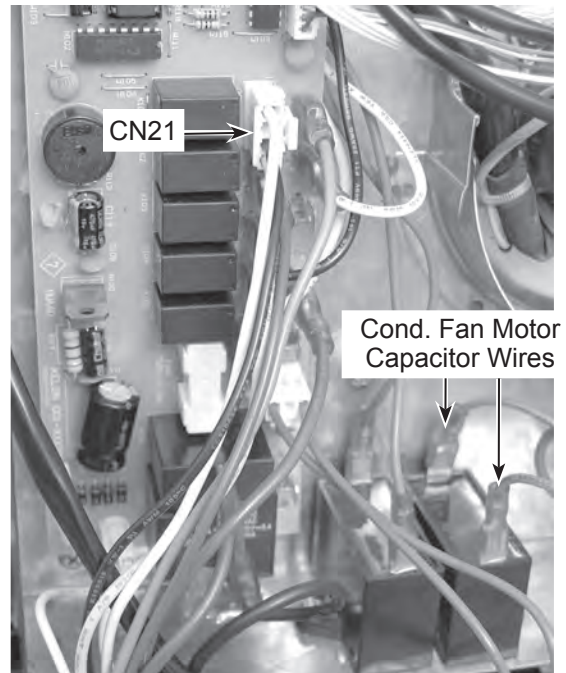


7. Remove the screw from the condenser fan motor green ground wire.
8. Raise the locking tab on the wire tie standoff, and pull the strap and wires out of the standoff.
9. Cut the indicated wire tie from the wires.

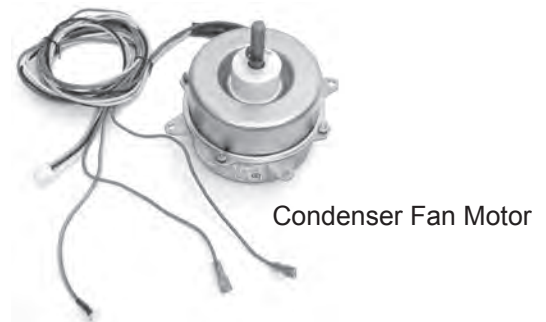


10. Cut the remaining wire ties that are necessary to remove the condenser fan motor wires from the chassis.

11. Disconnect the two red wires from the terminals of the condenser fan motor capacitor.
12. Unlock and disconnect the 3-wire connector from the control board at CN21.



13. Pull the condenser fan motor wires through the cover.



**REASSEMBLY NOTE:** Be sure to replace all of the wire ties that you removed with new ties, (see page 4-13 for the locations), and secure the wires neatly together.

# REMOVING THE OVERLOAD PROTECTOR AND THE COMPRESSOR

## ⚠️ WARNING

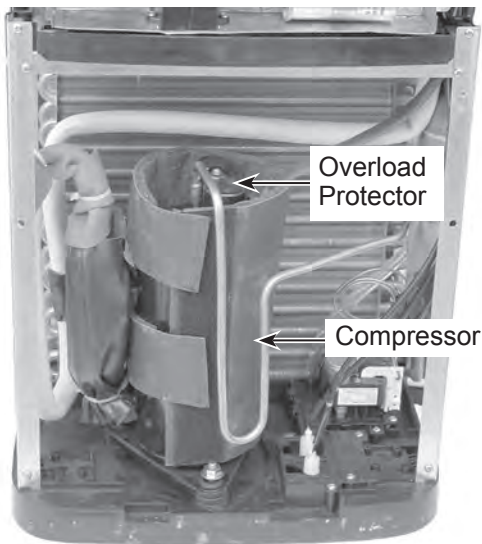


### Electrical Shock Hazard

Disconnect power before servicing.  
Replace all parts and panels before operating.

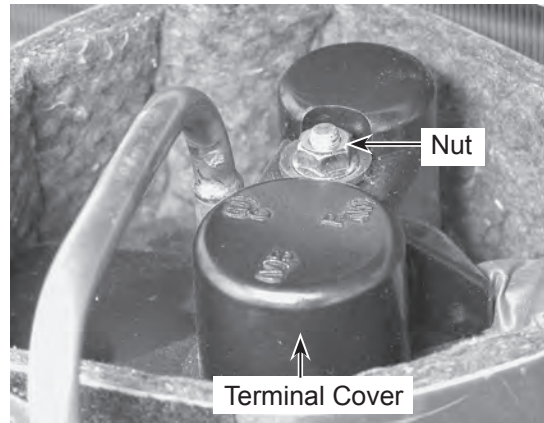
Failure to do so can result in death or electrical shock.

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Remove the components cover (see page 4-5 for the procedure).

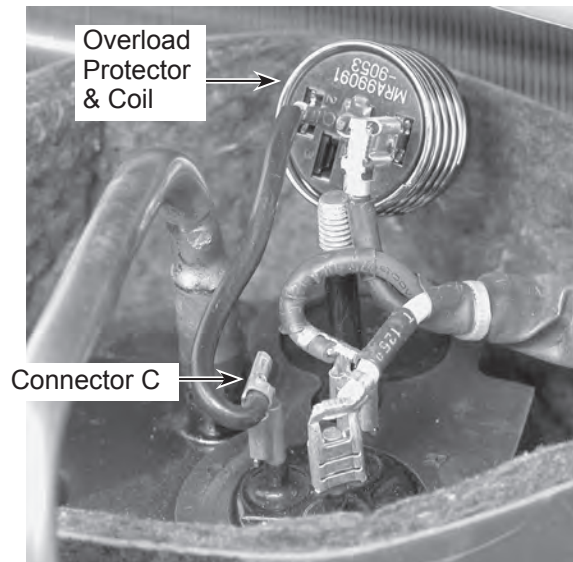


4. **CAUTION:** Discharge the capacitor by touching the leads of a 20,000 ohm resistor to the motor capacitor terminals.

5. To remove the overload protector:
  - a) Remove the 5/16" nut from the terminal cover and remove the cover.

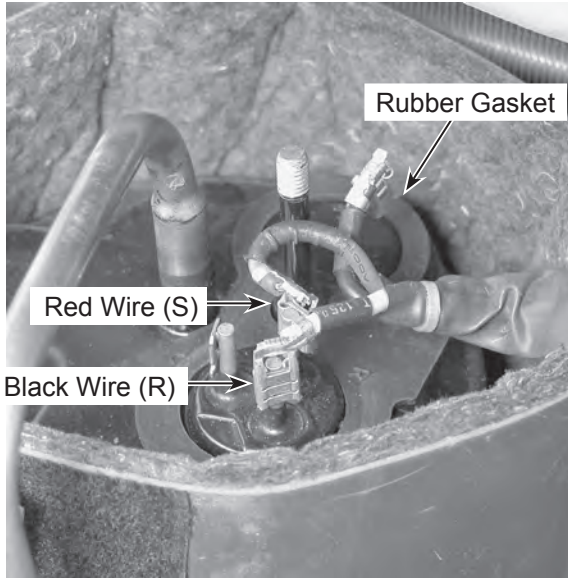


- b) Disconnect the wire from the overload protector terminal, and the overload protector wire from the compressor terminal (C), then remove the overload protector and coil.

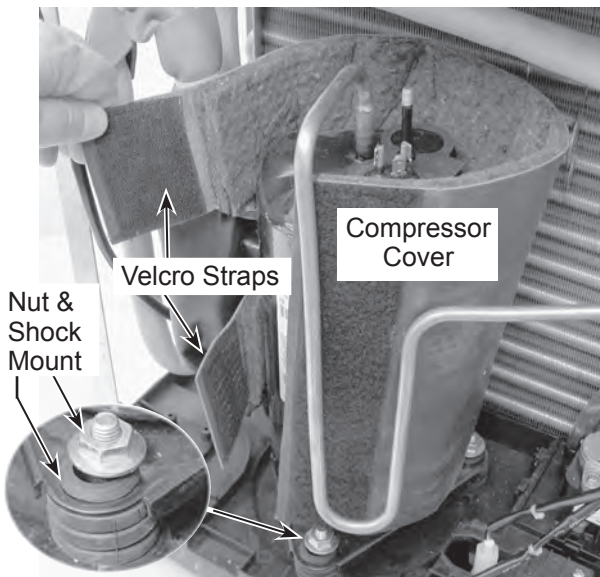


6. To remove the compressor:

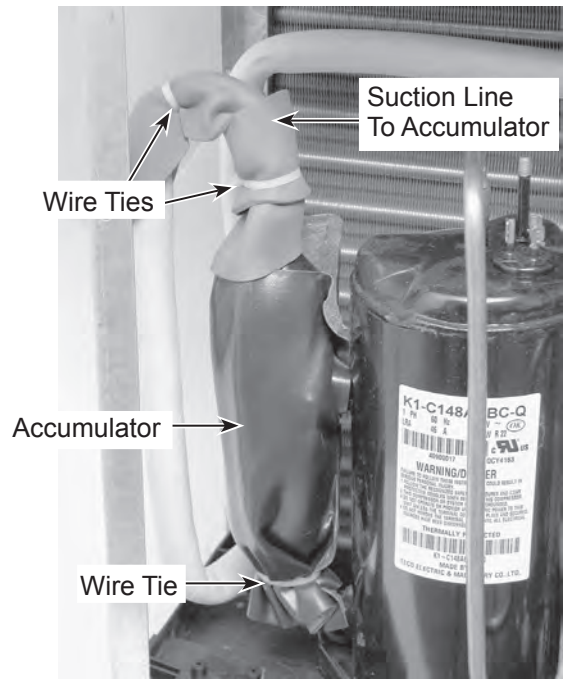
- a) Remove the overload protector (see step 5).
- b) Disconnect the black (R) and red (S) wires from the compressor terminals.
- c) Remove the rubber gasket.



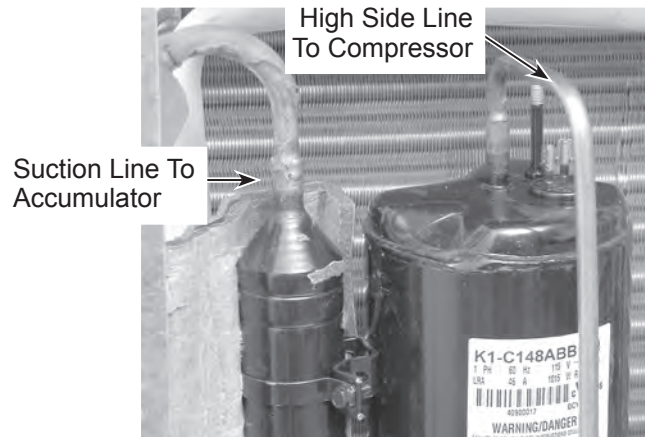
- d) Peel back the two Velcro® straps and remove the cover from the compressor.



- e) Cut the wire ties from the accumulator covering, and from the covering on the suction line to the accumulator (see the top right photo).
- f) Carefully peel the adhesive covering off the accumulator and the suction line to the accumulator.



- g) Braze on an access valve and discharge the sealed system refrigerant into an approved refrigerant recovery system.
- h) Disconnect the high side line from the compressor, and the suction line from the accumulator.



- i) Remove the three 1/2" hex nuts from the base of the compressor (see the small inset in the lower left photo).
- j) Lift the compressor off the unit and remove the three rubber shock mounts from the base.

**REASSEMBLY NOTE:** Be sure to replace the wire ties that you removed with new ties, and secure the wires neatly together.

## REMOVING THE EVAPORATOR

### ⚠ WARNING



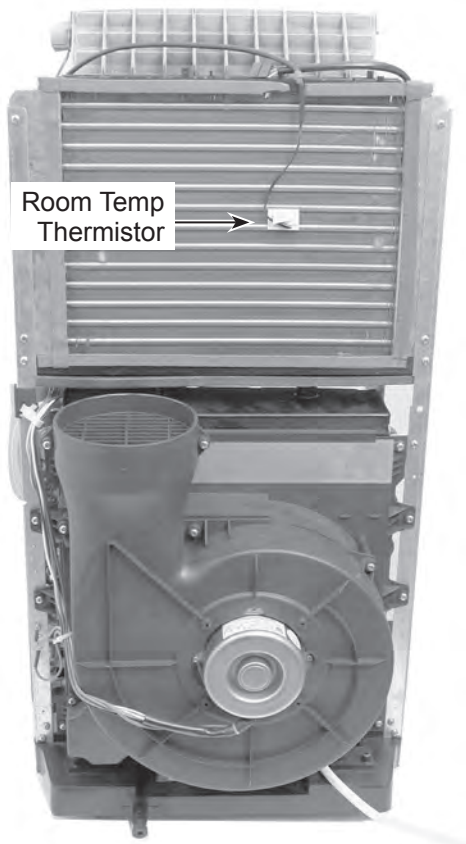
#### Electrical Shock Hazard

Disconnect power before servicing.

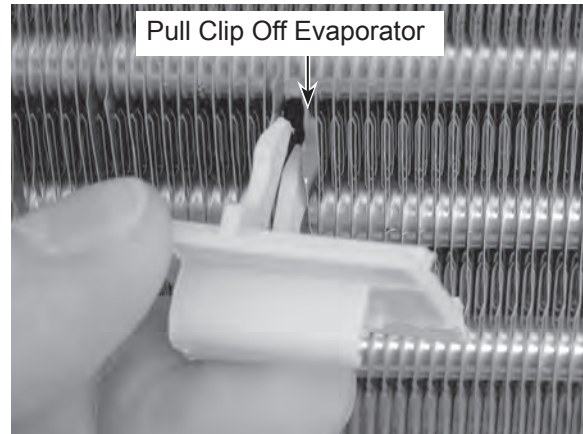
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

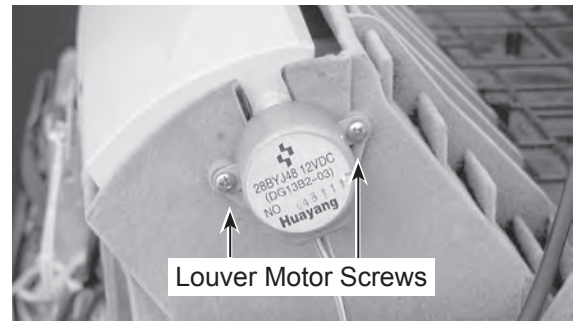
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Position the unit with the rear of the unit facing you.
4. Remove the room temp thermistor from the mounting clip.



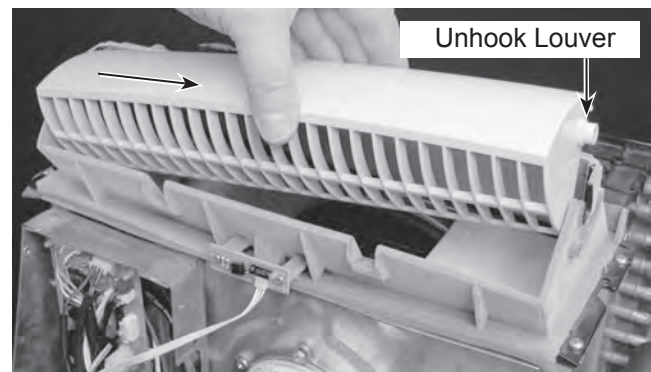
5. Pull the mounting clip off the evaporator tubing and reinstall it on the replacement evaporator at the same location.



6. Remove the two screws from the louver motor and remove the motor.

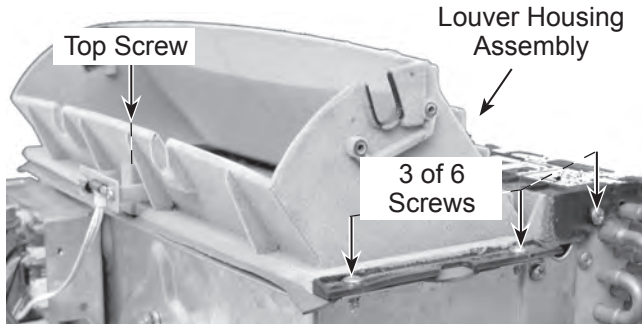


7. Unhook the right end, pull the left end out of the housing hole, and remove the louver from the top of the unit.

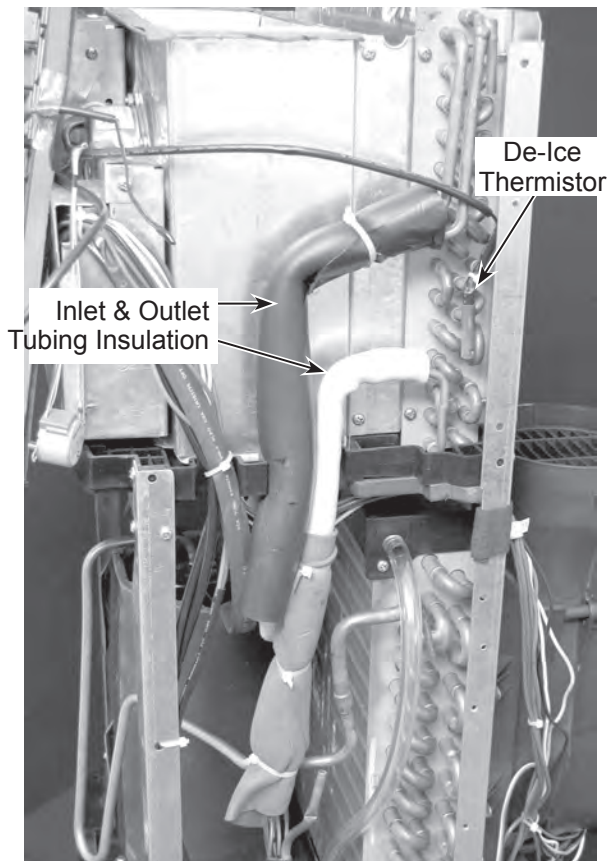




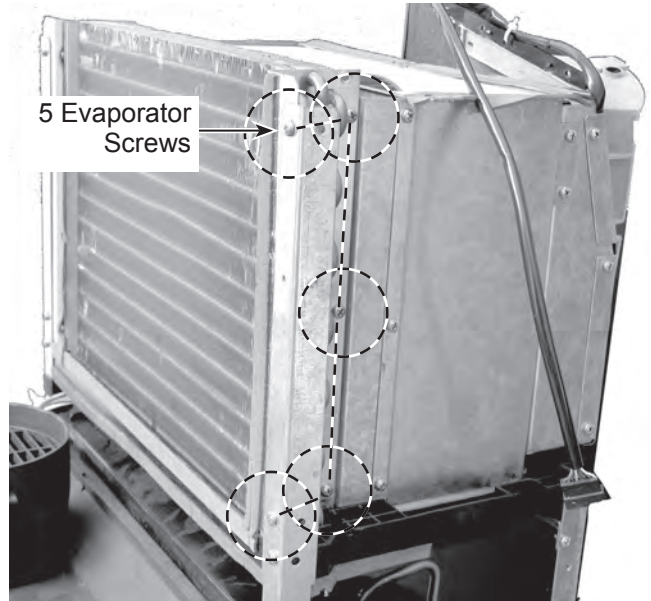
- Remove the seven screws (three on each side and one on top) from the louver housing assembly, and lift the assembly off the top of the unit so that you can access the fan.



- Cut the wire tie and pull the de-ice thermistor out of the housing in the evaporator.
- Remove the wire ties and foam insulation from around the evaporator inlet and outlet tubing.
- Braze on an access valve and discharge the sealed system refrigerant into an approved refrigerant recovery system.



- Measure the new evaporator inlet and outlet tubes, and cut the existing lines to the proper lengths.
- Remove the ten mounting screws (five on each side) from the evaporator.



- Lift the evaporator out of the unit.

**REASSEMBLY NOTE:** Be sure to replace the wire ties that you removed with new ties, and secure the wires neatly together.

## REMOVING THE CONDENSER

**⚠ WARNING**



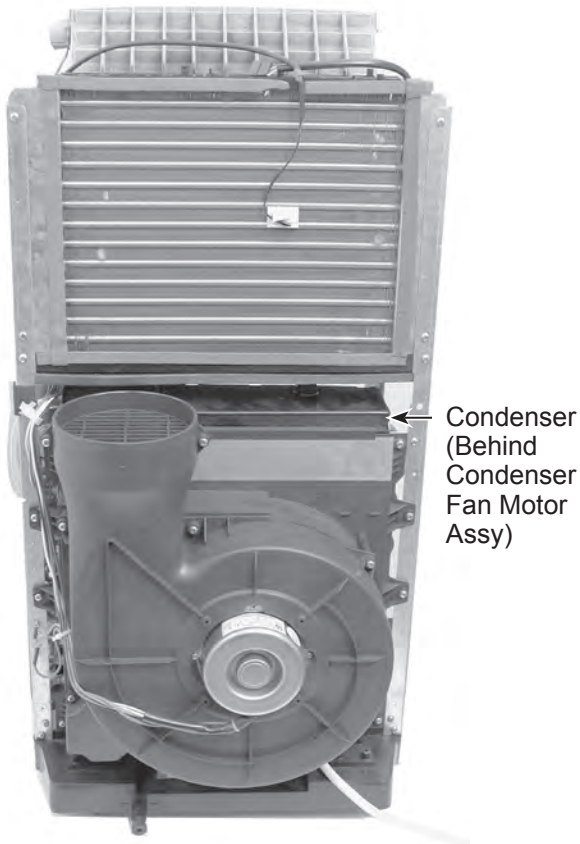
### Electrical Shock Hazard

**Disconnect power before servicing.**

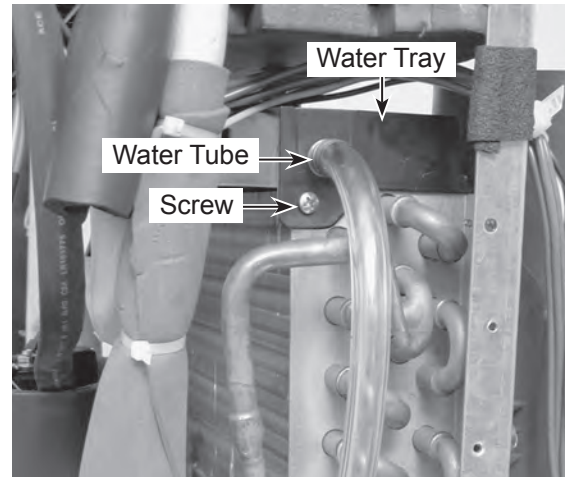
**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

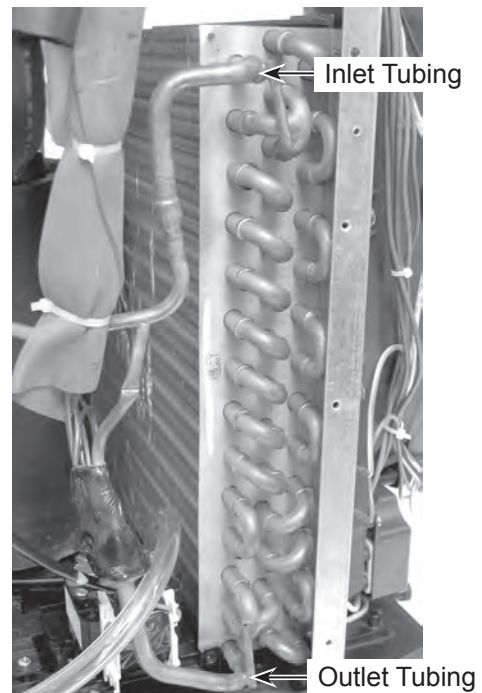
1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Position the unit with the rear of the unit facing you.



4. Pull the water tube off the water tray nozzle.
5. Remove the two screws (one on each side) from the water tray.
6. Slide the water tray back so it clears the two top drain nozzles, and remove the tray from the top of the condenser.

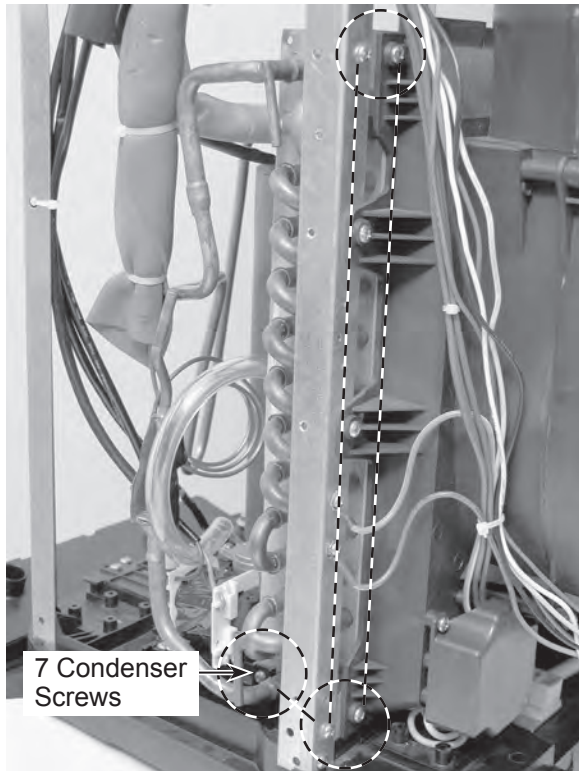


7. Braze on an access valve and discharge the sealed system refrigerant into an approved refrigerant recovery system.
8. Measure the new condenser inlet and outlet tubes, and cut the existing lines to the proper lengths.



9. Remove the fourteen mounting screws (seven on each side) from the condenser.

10. Remove the condenser from the unit.



# REMOVING THE POWER SUPPLY CORD

## ⚠ WARNING



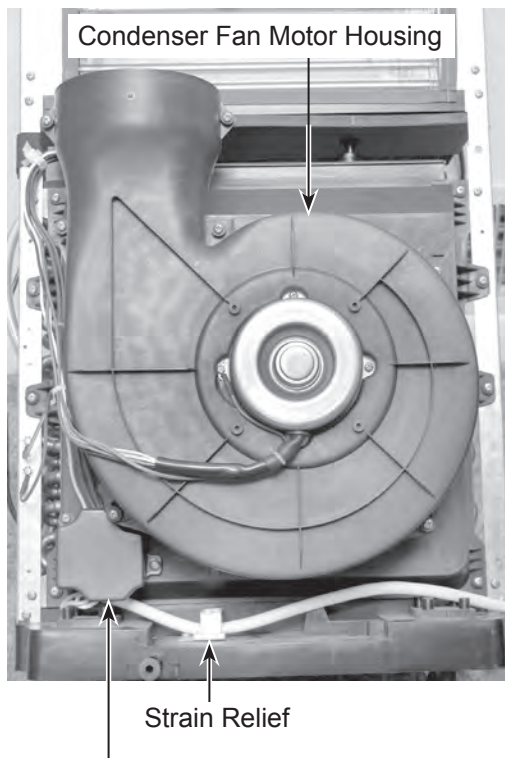
### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

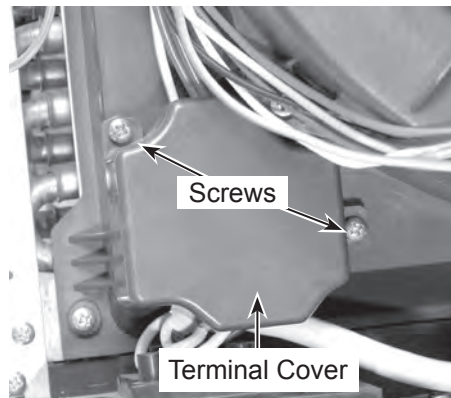
Failure to do so can result in death or electrical shock.

1. Unplug air conditioner or disconnect power.
2. Remove the cabinet from the unit (see page 4-2 for the procedure).
3. Position the unit with the rear of the unit facing you.

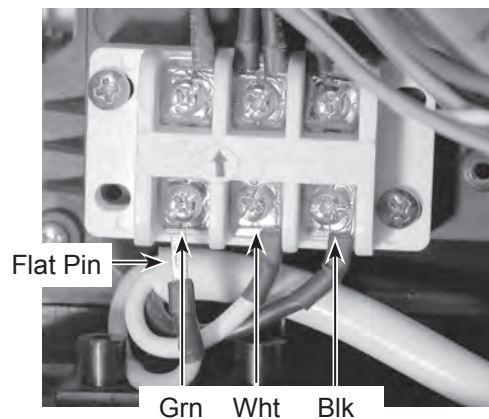


Power Supply Cord Terminal Cover

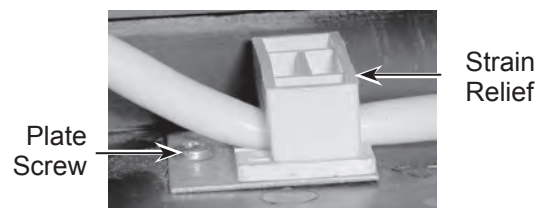
4. Remove the two screws from the terminal cover and remove the cover.



5. Loosen the three terminal clamp screws, and pull the flat pins on the ends of the green, white, and black power supply cord leads out of the clamp.




6. Using a 90° Phillips screwdriver, remove the screw from the strain relief plate, and remove the strain relief and power supply cord from the unit. **NOTE:** If you cannot remove the strain relief plate screw as described, remove the eight screws from the condenser fan motor housing (see the left photo), and remove the housing to access the strain relief.
7. Remove the screws inside the strain relief and remove the power supply cord.



# COMPONENT TESTING

Before testing any of the components, perform the following checks:

- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

	<b>⚠ WARNING</b>
	<b>Electrical Shock Hazard</b>
	<b>Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</b>

## LOUVER MOTOR



Refer to page 4-5 for the procedure for accessing the louver motor.

1. Unplug air conditioner or disconnect power.
2. Disconnect the louver motor connector from the control board.
3. Insert a small test wire into pin 1 of the louver motor connector.
4. Insert a small test wire into each of the remaining pins (2 - 5) in sequence to test the motor windings.
5. Set the ohmmeter to the R x 1 scale.
6. Clip the ohmmeter test leads to the test wires. The meter should indicate between 190 and 210  $\Omega$  for each of the windings.



## ⚠ WARNING

### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## FAN MOTOR & COMPRESSOR MOTOR CAPACITOR



Fan Motor Capacitor



Compressor Motor  
Capacitor

Refer to page 4-7 for the procedure for accessing a fan motor or compressor motor capacitor.

1. Unplug air conditioner or disconnect power.
2. **Discharge the capacitor by touching the leads of a 20,000  $\Omega$  resistor to the terminals.**
3. Disconnect the wires from the capacitor terminals.
4. Set the ohmmeter to the R x 1K scale.
5. Touch one of the ohmmeter test leads to the capacitor terminals. The meter should indicate several ohms, and gradually return to infinity.

## TRANSFORMER



Secondary  
(White)

Primary  
(Red)

Refer to page 4-7 for the procedure for accessing the transformer.

1. Unplug air conditioner or disconnect power.
2. Disconnect the transformer wires from the control board terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the plug terminals with the primary (red) transformer wires. The meter should indicate between 110 and 140  $\Omega$ .
5. Touch the ohmmeter test leads to the plug terminals with the secondary (white) transformer wires. The meter should indicate approximately 2  $\Omega$ .



## ⚠ WARNING

### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

### EVAPORATOR FAN MOTOR



Refer to page 4-9 for the procedure for accessing the evaporator fan motor.

1. Unplug air conditioner or disconnect power.
2. Disconnect the fan motor wires from the control board and capacitor terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the indicated fan motor wire connectors. The meter should indicate as follows:  
Red & red = between 125 and 145  $\Omega$ .  
Yellow & black = between 25 and 45  $\Omega$ .  
White & black = between 60 and 80  $\Omega$ .  
Yellow & white = between 95 and 115  $\Omega$ .  
One red & white = between 125 and 145  $\Omega$ .  
Other red & white = continuity

### CONDENSER FAN MOTOR



Refer to page 4-18 for the procedure for accessing the condenser fan motor.

1. Unplug air conditioner or disconnect power.
2. Disconnect the fan motor wires from the control board and capacitor terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the indicated fan motor plug pins and wire connectors. The meter should indicate as follows:

#### *Motor Wires*

Red & red = between 80 and 105  $\Omega$ .

#### *Motor Plug Pins*

Yellow & black = between 25 and 45  $\Omega$ .

White & black = between 30 and 50  $\Omega$ .

Yellow & white = between 60 and 80  $\Omega$ .

#### *Motor Wires & Plug Pin*

One red & white = between 80 and 105  $\Omega$ .

Other Red & white = continuity



## ⚠ WARNING

### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

### ROOM TEMP & DE-ICE THERMISTORS



Refer to page 4-11 for the procedure for accessing the room temp and de-ice thermistors.

**NOTE:** The two thermistors are replaced as an assembly.

1. Unplug air conditioner or disconnect power.
2. Disconnect the room temp & de-ice thermistor connector from the control board terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to plug terminals 1 & 2 (room temp), and 3 & 4 (de-ice). The meter should indicate the same resistance for either thermistor, as shown in the following chart.

Temp. °F, (°C)	Resistance, ±3%
32 (0)	50900
72 (22)	17210
75 (24)	15700
77 (25)	15000
84 (29)	12530

### WATER PUMP MOTOR



Refer to page 4-14 for the procedure for accessing the water pump motor.

1. Unplug air conditioner or disconnect power.
2. Disconnect the water pump motor wires from the control board terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the wire terminals. The meter should indicate between 15 and 35  $\Omega$ .





## ⚠️ WARNING

### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

### HIGH AND LOW WATER LEVEL SWITCHES



Refer to page 4-16 for the procedure for accessing the high and low water level switches.

1. Unplug air conditioner or disconnect power.
2. Disconnect the high or low water level switch connector from the control board.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the plug terminals. The meter should indicate an open circuit (infinite) with the switch float down, and continuity ( $0 \Omega$ ) with the float raised.

### OVERLOAD PROTECTOR



Refer to page 4-20 for the procedure for accessing the overload protector.

1. Unplug air conditioner or disconnect power.
2. **Discharge the compressor motor capacitor by touching a 20,000  $\Omega$  resistor to the capacitor terminals.**
3. Disconnect the overload protector wires.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter test leads to the overload protector terminal and connector. The meter should indicate continuity ( $0 \Omega$ ).



## ⚠ WARNING

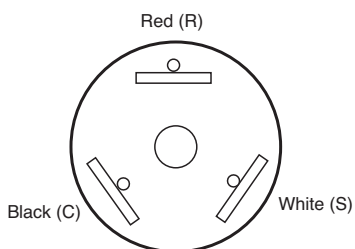
### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## COMPRESSOR



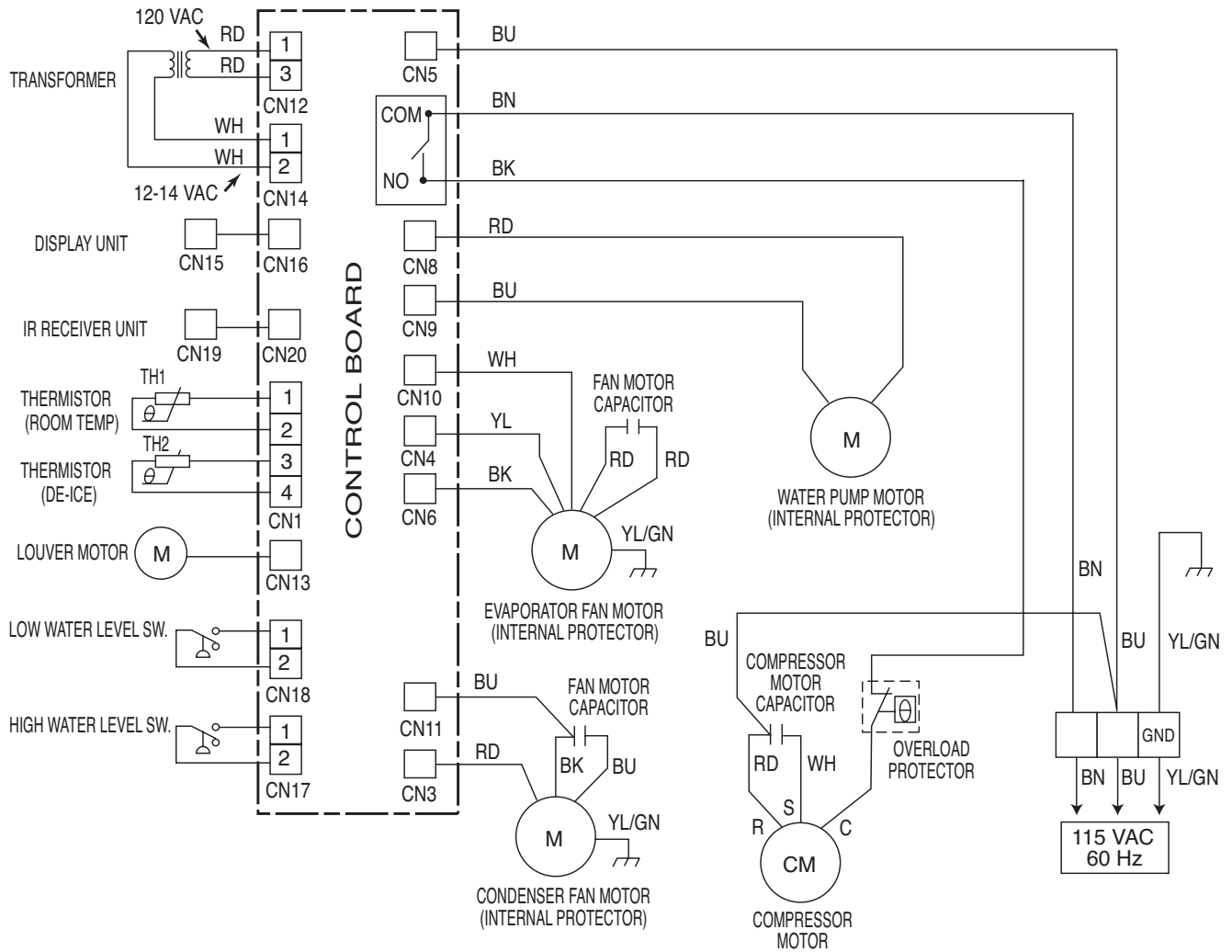
Refer to page 4-20 for the procedure for accessing the compressor.

1. Unplug air conditioner or disconnect power.
2. **Discharge the compressor motor capacitor by touching a 20,000  $\Omega$  resistor to the capacitor terminals.**
3. Disconnect the three wires from the compressor terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Clip an ohmmeter test lead to the overload protector terminal **C**.
6. Touch the free test lead to the following compressor terminals. The meter should indicate as shown:

Terminal **R** = 2.5  $\Omega$

Terminal **S** = 4.8  $\Omega$

# WIRING DIAGRAM



— NOTES —

— NOTES —

— NOTES —

# **PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES**

***IN THE UNITED STATES:***

**FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:**

**FOR WHIRLPOOL PRODUCTS: 1-800-253-1301**

**FOR KITCHENAID PRODUCTS: 1-800-422-1230**

**FOR ROPER PRODUCTS: 1-800-447-6737**

**FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:**

**THE TECHNICAL ASSISTANCE LINE: 1-800-253-2870**

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN  
AUTHORIZED SERVICER**

**FOR LITERATURE ORDERS:**

**PHONE: 1-800-851-4605**

**FOR TECHNICAL INFORMATION AND SERVICE POINTERS:**

**[www.servicematters.com](http://www.servicematters.com)**

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***IN CANADA:***

**FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:**

**1-800-461-5681**

**FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:**

**THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791**

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN  
AUTHORIZED SERVICER**

