

HAIER

WINDOW TYPE AIR CONDITIONER

Service Manual

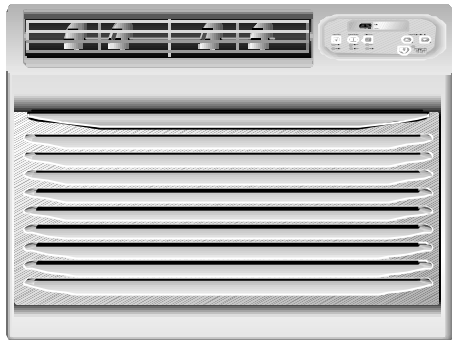
Part # AC-8888-104

HAIER TRADING COMPANY, LLC
www.haieramerica.com



Domestic Air Conditioner

SERVICE MANUAL



Models

HWR08XC5

ESA3065

ESA3085

● **Features**

- **Top-Discharge Air Flow**
- **Ultra Quiet Operation**
- **Safety Power Cord**
- **EnvicoClean™ Coil**
- **Easy-Access Washable Filter**
- **Digital Display&Timer**
- **Energy Star(ESA3065, ESA3085)**

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Product Code Illumination And Series Introduction

1.Model identification:

$\frac{H}{A}$ $\frac{W}{B}$ $\frac{\square}{C}$ $\frac{\square}{D}$ $\frac{\square}{E}$ $\frac{\square}{F}$ $\frac{\square}{G}$

- A: Abbreviation of Haier
- B: Abbreviation of Window
- C: R-Remote Control
F-Mechanical Control
- D: Nominal cooling capacity(BTU/h) with the first two numbers based on one thousand unit
- E: The type of power supply
X: 115V/60HZ
V:208/220V/50HZ
- F: Function code
C-Cooling only
H-Heating pump
E-Electric aided heating
- G: Design code

$\frac{E SA}{A}$ $\frac{\square}{B}$ $\frac{\square}{C}$ $\frac{\square}{D}$

- A: Abbreviation of Energy Star
- B: No meaning
- C: Nominal cooling capacity(BTU/h) with the first two numbers based on one thousand unit
- D: Design code

Examples:

HWR08XC5

It represents remote contrl window air conditioner.Cooling capacity is 8000BTU/h and the power supply is 115V /60Hz.

ESA3065

It represents remote contrl window air conditioner.Cooling capacity is 6000BTU/h and the power supply is 115V /60Hz.

2.Standard situation/conditions

No.	Operating condition	Indoor air state		outdoor air state	
		D.B.	W.B.	D.B.	W.B.
1	Nominal cooling	26.7	19.4	35	23.9
2	Nominal heating	/	/	/	/
3	Nominal electrical heating	/	/	/	/

Specifications:

Item	UNIT	HWR08XC5	ESA3065	ESA3085		
Cooling capacity	BTU/h	8000	6000	8000		
Heating capacity	BTU/h	/	/	/		
Power supply		1PH/115V/60Hz	1PH/115V/60Hz	1PH/115V/60Hz		
Cooling	Power input	W	810	560	740	
	Running current	A	7.3	4.9	7.1	
	EER	BTU/(hW)	9.8	10.7	10.8	
Heating	Power input	W	/	/	/	
	Running current	A	/	/	/	
	COP	BTU/(hW)	/	/	/	
Sound Level	Indoor side	dB(A)	53/52/50	53/52/50	53/52/50	
	Outdoor side	dB(A)	/	/	/	
Case	Height	mm	347	347	347	
	Width	mm	500	500	500	
	Depth	mm	450	450	450	
Packaging dimensions	Height	mm	445	445	445	
	Width	mm	552	552	552	
	Depth	mm	486	486	486	
Weight	Net	kg	24	24	24	
	Gross	kg	26.5	26.5	26.5	
Compressor	Type		Rotate	Rotate	Rotate	
	Model		2R12S3R126A6 A	SD086UW-H3 BG	2R12S3R126A6A	
	Running cap. for comp.	μF	35uf/250VAC	40uf/250VAC	35uf/250VAC	
	Starting method		PSC	PSC	PSC	
Pressure	Heating side	MPa	380	380	380	
	Cooling side	MPa	170	170	170	
Refrigerant	Model		R22	R22	R22	
	Charge	kg	0.40	0.435	0.42	
Fan	Type	indoor unit	Acentric fan	Acentric fan	Acentric fan	
		outdoorunit	Axial fan	Axial fan	Axial fan	
	Fan speed	indoor unit	r/min	960±30/800±40/5 75±30	960±30/800±40/57 5±30	960±30/800±40/57 5±30
		outdoorunit	r/min	/	/	/
Air volume	m ³ /hr	330	330	330		
Moisture removal	Pints/hr	1.2 10 ⁻³	1.2 10 ⁻³	1.2 10 ⁻³		
Exchanging pipe type/ diameter	mm	Evaporator: ? 7 condenser: ? 7	Evaporator: ? 7 condenser: ? 7	Evaporator: ? 7 condenser: ? 7		
Fin material		Hydrophile aluminum foil	Hydrophile aluminum foil	Hydrophile aluminum foil		

Safety and Precaution

SAFETY PRECAUTIONS

WARNING: *Following these basic precautions will reduce the risk of fire, electrical shock, injury or death when using your air conditioner.*



- 1) Air conditioner must be connected to proper electrical outlet with the correct electrical supply. (see table)
- ⚠ 2) Proper grounding must be ensured to reduce the risk of shock and fire. **DO NOT CUT OR REMOVE THE GROUNDING PRONG.** If you do not have a three-prong electric receptacle outlet in the wall, have a certified electrician install the proper receptacle. The wall receptacle **MUST** be properly grounded.
- ⚠ 3) Do not use if power cord is frayed or otherwise damaged. Also avoid using it if there are cracks or abrasion damage along the length, plug or connector.
- ⚠ 4) **DO NOT USE AN ADAPTER OR AN EXTENSION CORD.**
- ⚠ 5) When installing your air conditioner in a window, make sure the window is strong enough to hold the weight of the air conditioner. You also want to secure and correctly install your air conditioner properly to prevent it from falling. Extra brackets and or support may be required depending on your window.
- 6) Do not block airflow inside or outside the air conditioner with blinds, drapes, protective covers, shrubs or bushes.
- 7) Be careful of sharp edges on the front and rear fins of the unit that could cut and cause serious injury.
- 8) Be careful when lifting the air conditioner to install or remove the unit. Always use two or more people for this.
- 9) Always unplug the air conditioner before servicing it or moving it.

Warning and Cautions

WARNINGS



Following the safety messages is very important.

These messages can save you from being injured or killed.

Warning symbols alert you to be careful and means **Danger**. Always follow instructions to be safe and reduce chances of injury or death.

Warning and **Danger** signs will precede safety messages.

Electrical Safety



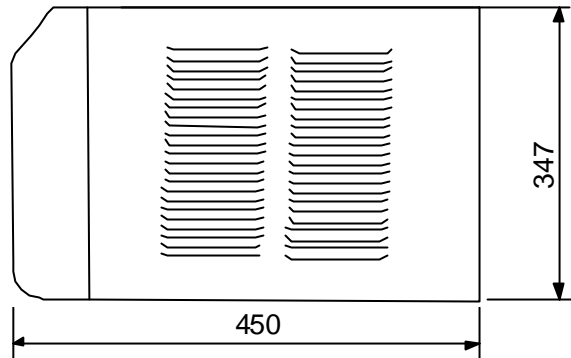
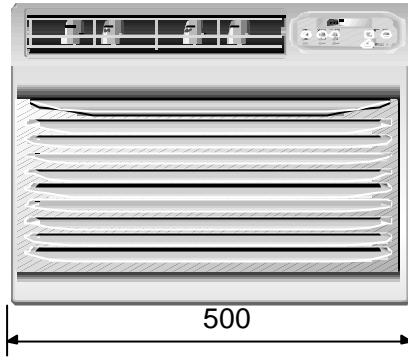
Grounding: This room air conditioner must be grounded. Grounding reduces the risk of electric shock by providing an escape wire for the electric current. The power cord has a grounding wire with a grounding plug. Plug it into an outlet that is properly installed and grounded.

WARNING: Improper use of the grounding plug can result in a risk of electric shock. Call a qualified electrician if you don't understand the grounding instructions or if you are not sure if the air conditioner is properly grounded. If the wall outlet is not grounded, please contact an electrician to have it replaced with a properly grounded outlet.

Do not, under any circumstances, cut or remove the third (ground) prong from the power cord.

Adapter Plug: We strongly advise against using an adapter plug.

Net Dimension

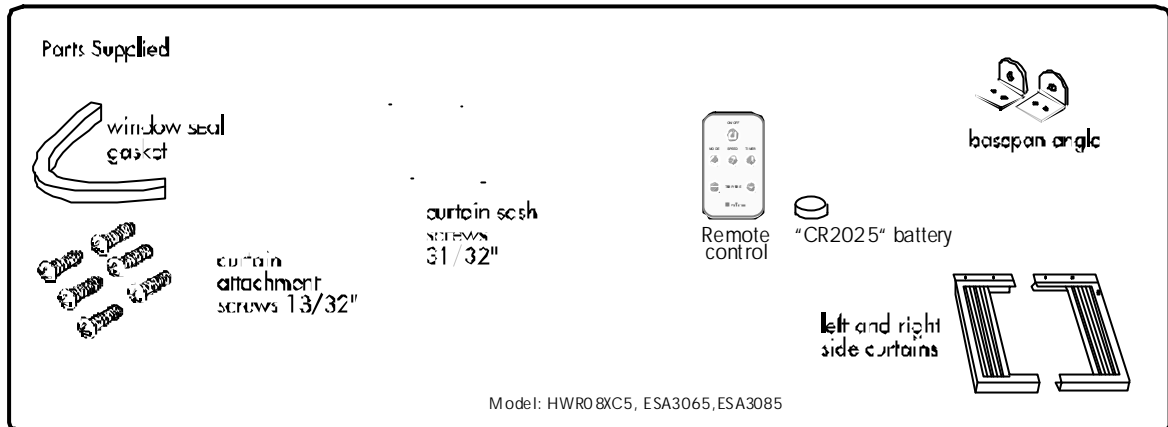


Installation and Accessory Parts

Before you install your air conditioner check the following:

- 1) The unit is free of all obstructions inside and outside the room e.g. drapes, curtains, furniture, plants, shrubs, bushes, trees, other structures like building, garage etc. Air conditioner must have clear unobstructed airflow through the condenser to remove the heat.
- 2) The window is strong enough to hold the weight of the air conditioner. Extra brackets or supports may be needed depending on your windows. (Brackets or Supports not provided in all models)
- 3) The window sill and track are strong enough to hold the weight of the air conditioner.
- 4) The wall is strong enough to hold the unit. Extra brackets or supports may be needed depending on the wall. (Brackets or Supports not provided in all models)
- 5) There is adequate and proper power supply near the air conditioner.
- ⚠ 6) DO NOT use adapter plugs.
- ⚠ 7) DO NOT use extension cords.
- ⚠ 8) DO NOT cut or remove the ground prong.
- ⚠ 9) DO NOT modify the plug or the electrical wall outlet in any way. If plug does not fit the electrical outlet have a certified electrician do the necessary change.
- ⚠ 10) DO NOT connect electrical power to the unit before installation.
- ⚠ 11) DO NOT use if power cord is worn out, frayed or otherwise damaged. Avoid using if there are cracks or abrasion damage along the length, plug or connection.
- ⚠ 12) DO NOT install into any existing cabinet or sleeve which does not have side and top air vents.
- ⚠ 13) Be careful of exposed sharp edges of the cabinet and sharp coils (fins) on the back of the unit that could cut and cause serious injury.

Installation and Accessory Parts



Tools

You will need to have the following tools to help you in the installation of your air conditioner.

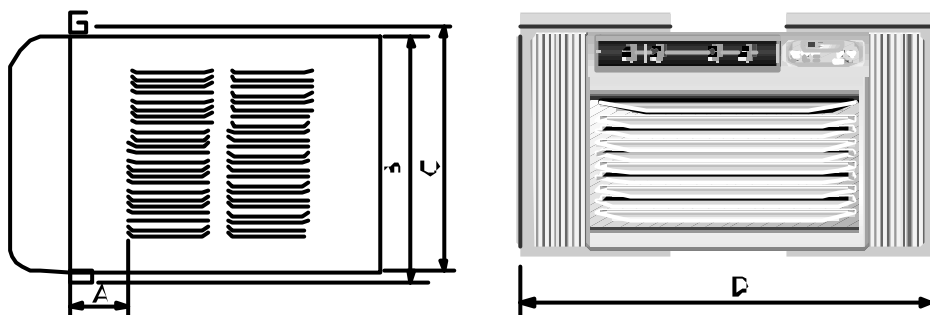
- Scissors
- Phillips Screwdriver
- Standard Screwdriver
- Pliers
- Wrench
- Drill and Drill Bits
- Tape Measure
- Gloves
- Level
- Sockets

Installation and Accessory Parts

Installing Unit into A Window

Window Opening Requirements

The air conditioner is designed to fit into double or single hung sash type windows. Each of the units comes with an installation kit that provides adjustable mounting louvers, to fill the gaps between the sides of the unit, and the window frame. The chart below reflects the dimensions of the units with, and without installation kits. Measure your window opening width and compare it to the chart below to ensure that it meets the minimum and maximum window width requirements.

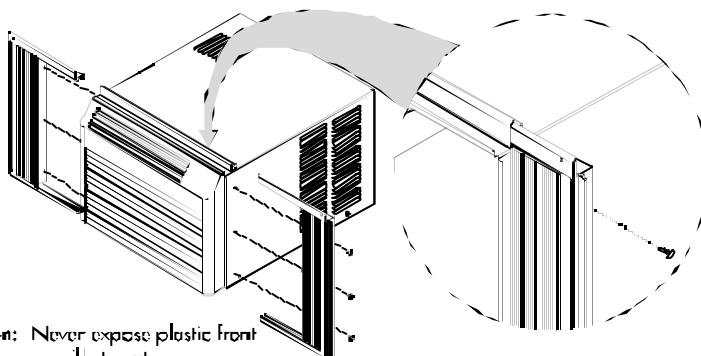


HWR08XC5, ESA3065, ESA3085

Model	HWR08XC5, ESA3065, ESA3085
Dimension	
A(inch)	$2\frac{0}{16}''$
B(inch)	$14\frac{3}{8}''$
C(inch)	$14\frac{0}{32}''$
D(inch) Max	$32\frac{1}{4}''$
D(inch) Min	$23\frac{5}{8}''$
Case High	$13\frac{13}{16}''$
Case Width	$20\frac{1}{4}''$
Case Depth	$12\frac{5}{8}''$

1 ASSEMBLE CURTAINS

Unpack unit on floor next to installation location.
Slide left-hand curtain assembly into left ends of top and bottom rails.
Repeat for right hand curtain assembly. Fasten curtain retaining strips to sides of outer case with six 13/32" screws.



Caution: Never expose plastic front or grille to extreme temperatures.

Installation and Accessory Parts

2 PREPARE WINDOW FOR INSTALLATION

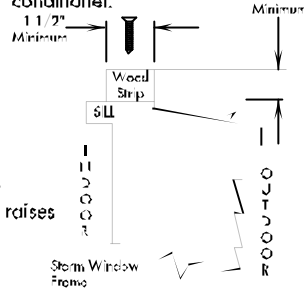
Inspect window track, sash, and sill for its ability to support the weight of air conditioner.

Measure width between window moldings to ensure Instant Mount will fit window frame. Instant Mount models are designed for windows (the detail see page 11)

Instant Mount kit supplied with unit is designed for mounting in most double hung windows **without storm windows**. For installation in window frame with storm window, modify sill by adding wood strips (not included) to inner and outer sills. This raises unit and eliminates interference of storm window frame.

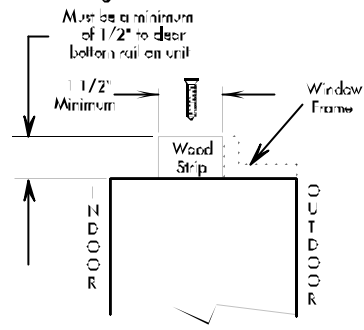
Storm window installation

If storm window frame does not allow adequate clearance below sill (1/2" required), remove storm window frame or create clearance by adding a wood strip (at least 1 1/2" wide) along entire width of sill. Fasten wood strip to sill with at least three countersunk wood screws (not supplied with kit). This provides a smooth surface for mounting air conditioner.



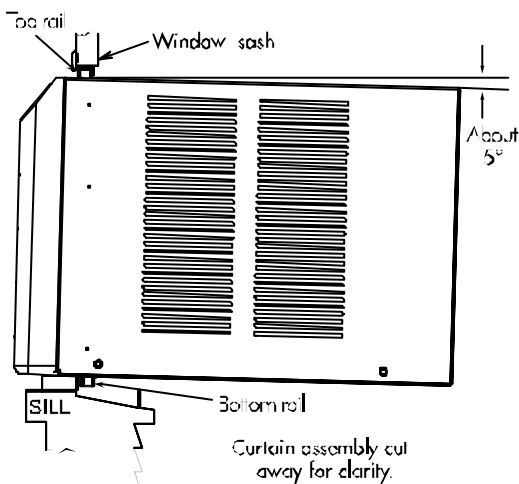
Mobile home window installation

Add wood strip (at least 1 1/2" wide) along entire width of window sill. Thickness of wood strip should match height of front lip on window frame. Fasten wood strip to sill with a minimum of three countersunk wood screws (not supplied with kit). This provides a smooth surface for mounting air conditioner.



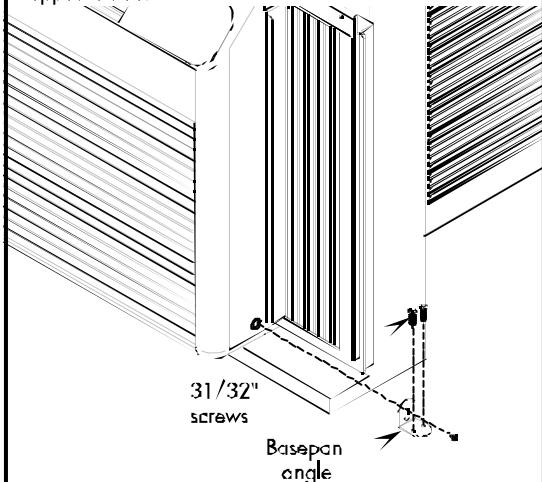
3 INSTALL UNIT IN WINDOW

Place unit in window. Lower sash until it rests behind front flange of top rail. Bottom rail must rest behind window sill.



4 INSTALL BASEPAN ANGLE

Back front attachment screw out several turns and slip Basepan Angle over screw head. Snug screw with angle resting on window ledge. Install two 31/32" screws through angle into window ledge. Repeat for opposite side.

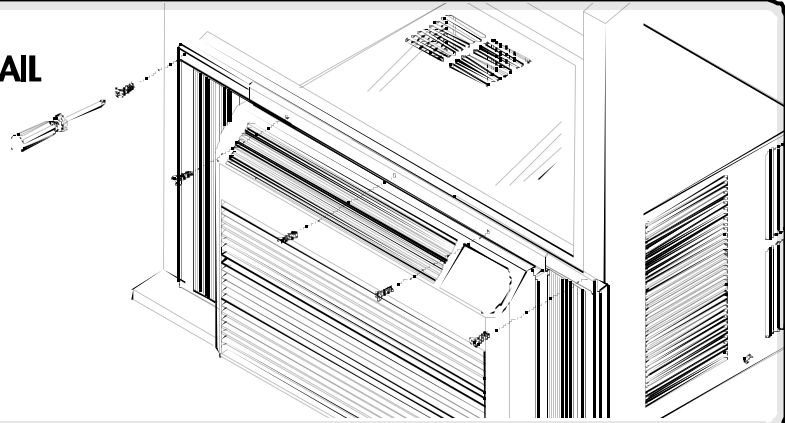


Installation and Accessory Parts

5 SECURE SIDE CURTAINS AND TOP MOUNTING RAIL

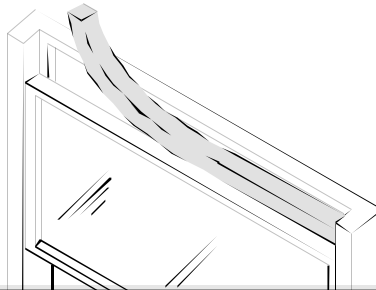
Expand curtains as far as possible. Install (2) 3/8" curtain sash screws. Install (3) 25-mm top mounting rail. For hard wood or metal window frames, drill a pilot hole to start screw.

IMPORTANT: Be careful not to drill pilot hole too deep. Add a piece of tape to the drill bit as a depth gauge. Also stay clear of glass. Be careful not to damage the function of the window.

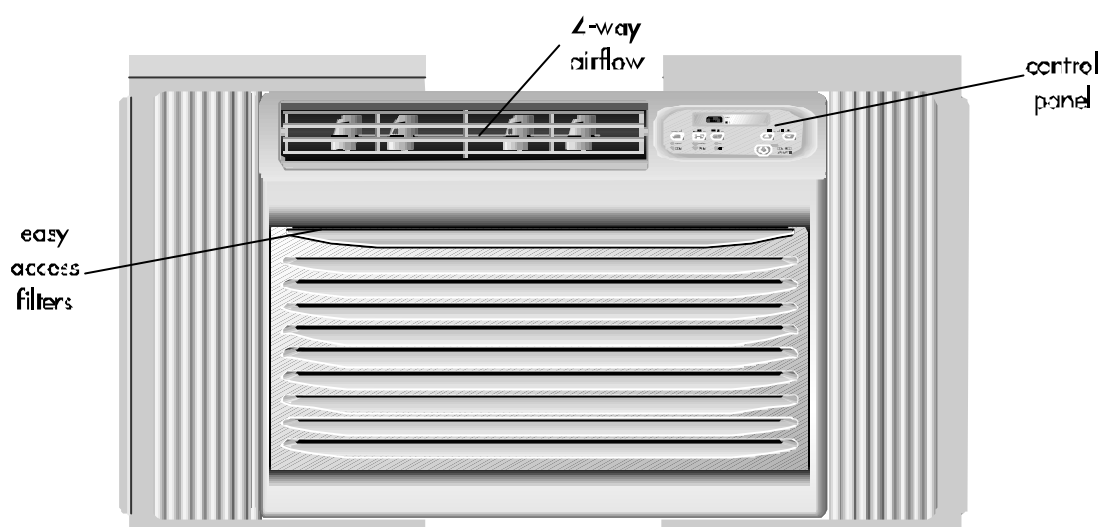


6 INSTALL SEAL GASKET

Cut window seal gasket to width of window. Stuff window seal gasket between outdoor window glass and top of indoor sash. This will stop air leakage which reduces efficiency.



Parts and Functions



MODEL: HWR08XC5 ESA3065, ESA3085

1. Thermostat

This allows you to adjust the temperature of the air. The lower the setting the cooler the air temperature. With this you can set the temperature to your desired comfort level. You can set the temperature between 61°F and 86°F.

2. fan Speed

You have 2 levels of Fan speed to set at your desired comfort level.

3. Function.

Your air conditioner has 2 Functions.

a) COOL

Here the air conditioner will operate the compressor and the desired fan speed set to give you chilled cold air for your comfort.

b) Fan

You can run the fan only on not so hot days. The fan can be set to run at 2 speeds as desired by you.

4. Timer

6. Window Install Kit

Enables you to install the air conditioner in a double hung window. Extra brackets or support may be needed depending on your window.

7. Remote Control

This full functional wireless remote allows you to operate your air conditioner from a distance. You need not have to get up to change the settings, the functions or to turn the unit on or off.

8. LED Display Electronic Control Panel

The 4 function LED displays Room Temperature, Temperature Setting, Timer Setting and Time Remaining to Stop / Start the unit. Electronic Control Panel lets you set the temperature to the Exact Temperature you desire.

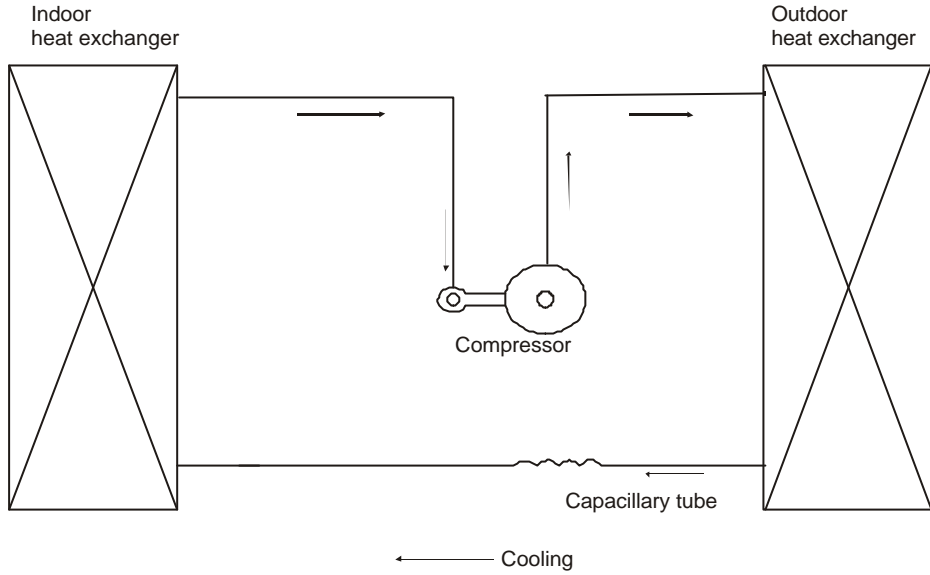
9. Electrostatic Filter

Being constructed of high efficiency purifying substance, active carbon fabric, electrostatic fabric, electrostatic active carbon net and other materials

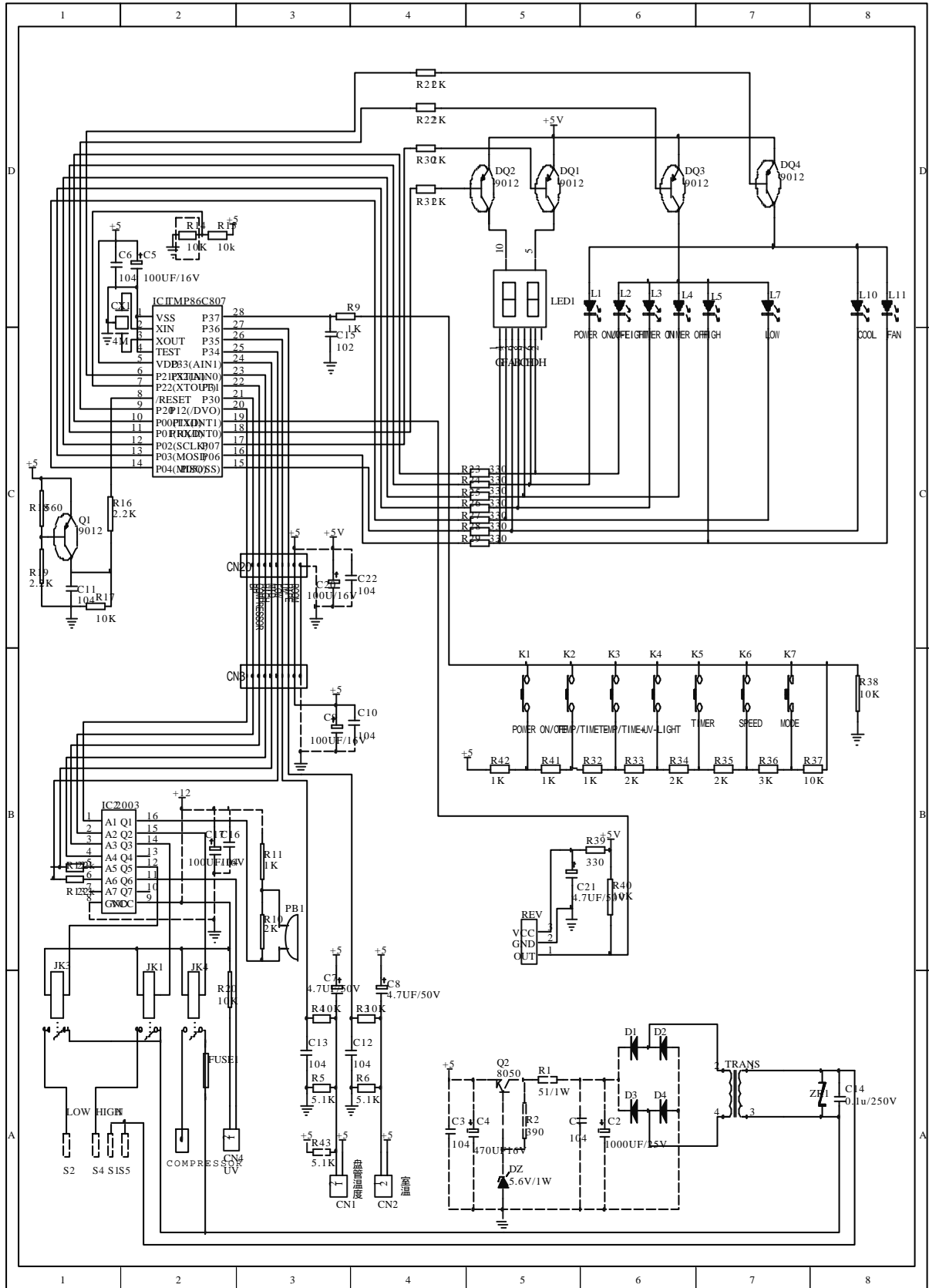
Abnormity Diagnose

1. Sensor diagnose: 2 seconds after the sensors open circuit or short circuit, the unit will turn off automatically and the LED will show E0 until the sensors resume.
2. Keystroke circuit error diagnose: When power on for the first time, the PCB will check the keystroke circuit, if the sampling value is different with the theory value, the LED will show E1, which means failed keystroke circuit. The keyboard is locked and so invalid, but the remote control is working normally.

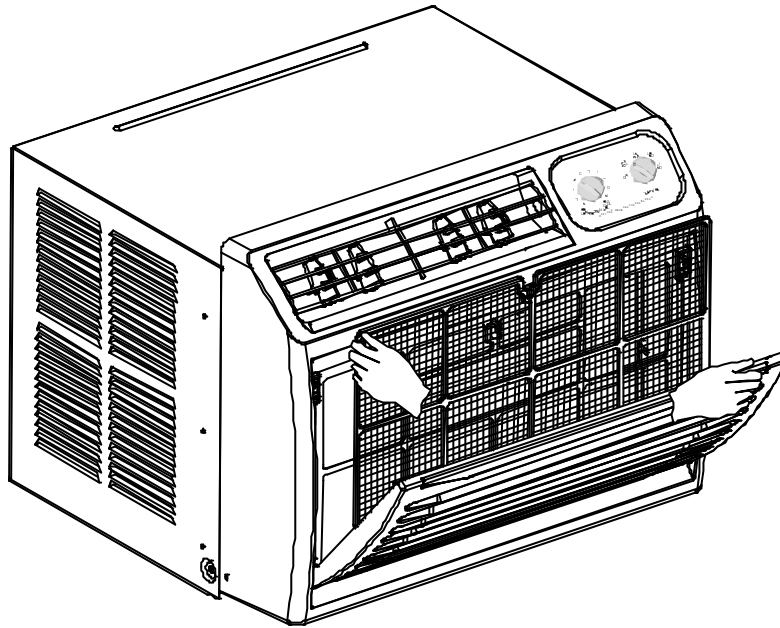
System Flow Chart



Circuit Diagram



Maintenance Service and Trouble Shooting



- **Always unplug your air conditioner before cleaning.**
- **The air filter behind the front grille should be checked and cleaned at least once every 2 weeks or more often if necessary.**

To remove:

1. Open the inlet grille downward by pulling out the top of the inlet grille.
2. Remove the air filter from the front grille assembly by pulling the air filter up slightly.
3. Clean the filter with warm, soapy water below 40°C(104°F).
4. Rinse and gently shake the water from the filter and let it dry before replacing it.

DO NOT use your air conditioner without the air filter in place.

- **To clean the front panels or the cabinet DO NOT use harsh chemicals, abrasives, ammonia, chlorine, bleach, concentrated detergents, solvents or metal scouring pads. Some of these chemicals**

Maintenance Service and Trouble Shooting

Trouble Shooting

If air conditioner does not operate:

Check if unit is plugged in. The plug may have come loose.

Check if the unit is in "off" mode.

The fan control may be in "off" position.

Air from air conditioner is warm:

The A/C setting may need to be raised.

The temperature outside the room is below 65 ° F. The compressor will not cycle on if the temperature outside is below 65 ° F.

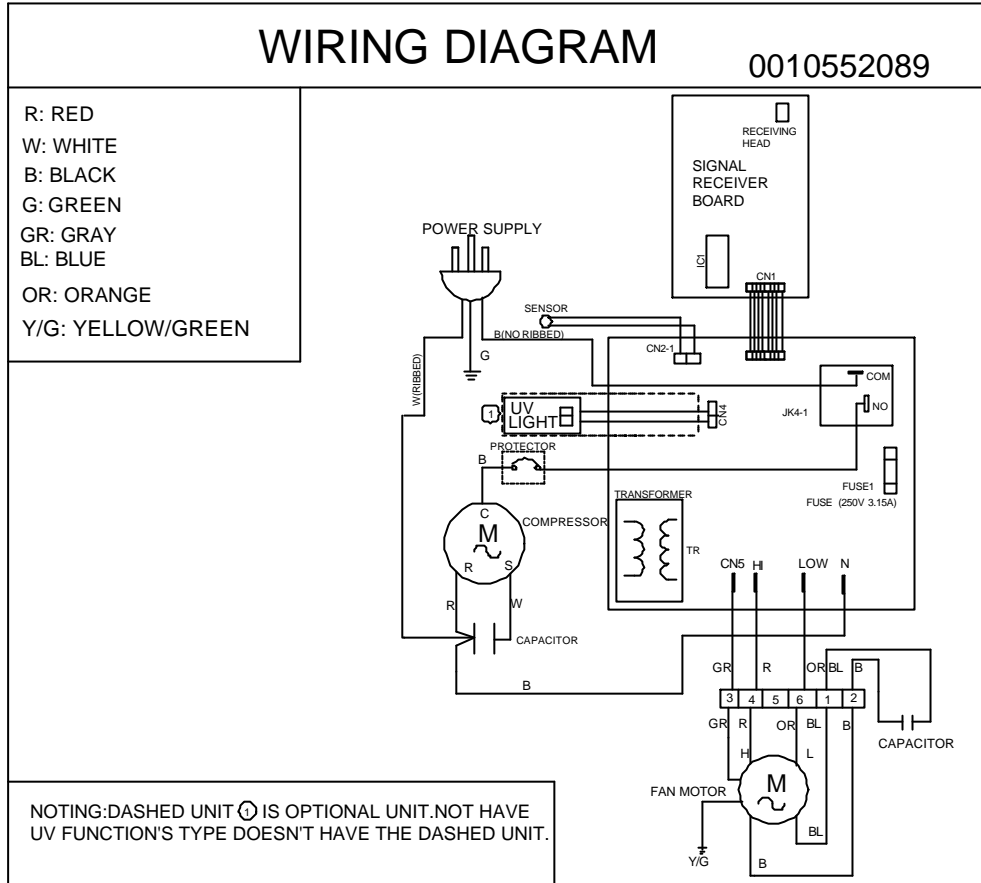
Ice formation on cooling coils:

Outside temperature too cold. Set the unit on fan only setting to defrost ice.

Lower temperature setting. Temperature setting may be too cold.

Unit BTU may be too high for the room.

Wiring Diagram



Sincere Forever

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