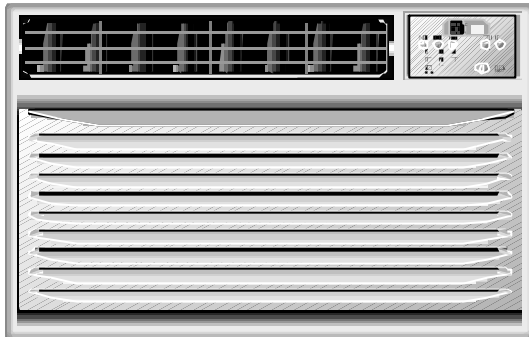




Domestic Air Conditioner

SERVICE MANUAL



Models

HWR10XC5 HWR10XC5-T

HWR12XC5

ESA3105

ESA3125

Part number: HWR12XC5

● Features

- **Top-Discharge Air Flow**
- **Ultra Quiet Operation**
- **Safety Power Cord**
- **EnvicoClean™ Coil**
- **Easy-Access Washable Filter**
- **Digital Display&Timer**

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Product Code Illumination And Series Introduction

1.Model identification:

H	W						
A	B	C	D	E	F	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

Examples:

HWR10XC5

It represents remote contrl window air conditioner.Cooling capacity is 10000BTU/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	HWR10XC5,HWR10XC5-T	HWR12XC5	
Cooling capacity		BTU/h	10000	12000	
Heating capacity		BTU/h	/	/	
Power supply			1PH/115V/60Hz	1PH/115V/60Hz	
Cooling	Power input	W	1020	1220	
	Running current	A	9.0	10.6	
	EER	BTU/(hW)	9.8	9.8	
Heating	Power input	W	/	/	
	Running current	A	/	/	
	COP	BTU/(hW)	/	/	
Sound Level	Indoor side	dB(A)	/	/	
	Outdoor side	dB(A)	/	/	
Case	Height	mm	380	380	
	Width	mm	600	600	
	Depth	mm	570	570	
Packaging dimensions	Height	mm	470	470	
	Width	mm	643	643	
	Depth	mm	613	613	
Weight	Net	kg	36.5	40	
	Gross	kg	40	40.5	
Compressor	Type		Rotate	Rotate	
	Model		44R241A	44R291A	
	Running cap. for comp.	μ F	60μF / 250 VAC	60μF / 250 VAC	
	Starting method		PSC	PSC	
Pressure	Heating side	Psig	380	380	
	Cooling side	Psig	170	170	
Refrigerant	Model		R22	R22	
	Charge	kg	0.61	0.67	
Fan	Type	indoor unit	Acentric fan	Acentric fan	
		outdoorunit	Axial fan	Axial fan	
	Fan speed	indoor unit	r/min	1050 ± 30/1000 ± 40/950 ± 40	1050 ± 30/1000 ± 40/950 ± 40
		outdoorunit	r/min	1050 ± 30/1000 ± 40/950 ± 40	1050 ± 30/1000 ± 40/950 ± 40
Air volume		CFM	520	520	
Moisture removal		ℳ³/h	2.0 10 ⁻³	2.0 10 ⁻³	
Exchanging pipe type/ diameter		mm	Evaporator: 7 condenser: 7	Evaporator: 7 condenser: 7	
Fin material			Hydrophile aluminum foil	Hydrophile aluminum foil	

Specifications:

Item		UNIT	ESA3105	ESA3125	
Cooling capacity		BTU/h	12000	10000	
Heating capacity		BTU/h	/	/	
Power supply			1PH/115V/60Hz	1PH/115V/60Hz	
Cooling	Power input	W	1220	1020	
	Running current	A	10.6	9.0	
	EER	BTU/(hW)	9.8	9.8	
Heating	Power input	W	/	/	
	Running current	A	/	/	
	COP	BTU/(hW)	/	/	
Sound Level	Indoor side	dB(A)	/	/	
	Outdoor side	dB(A)	/	/	
Case	Height	mm	380	380	
	Width	mm	600	600	
	Depth	mm	570	570	
Packaging dimensions	Height	mm	470	470	
	Width	mm	643	643	
	Depth	mm	613	613	
Weight	Net	kg	40	40.5	
	Gross	kg	40.5	40	
Compressor	Type		Rotate	Rotate	
	Model		39R231A	44R281A	
	Running cap. for comp.	μ F	60μF / 250 VAC	60μF / 250 VAC	
	Starting method		PSC	PSC	
Pressure	Heating side	Psig	380	380	
	Cooling side	Psig	170	170	
Refrigerant	Model		R22	R22	
	Charge	kg	0.665	0.71	
Fan	Type	indoor unit	Acentric fan	Acentric fan	
		outdoorunit	Axial fan	Axial fan	
	Fan speed	indoor unit	r/min	1050 ± 30/1000 ± 40/950 ± 40	1050 ± 30/1000 ± 40/950 ± 40
		outdoorunit	r/min	1050 ± 30/1000 ± 40/950 ± 40	1050 ± 30/1000 ± 40/950 ± 40
Air volume		CFM	520	520	
Moisture removal		M ³ /h	2.0 10 ⁻³	2.0 10 ⁻³	
Exchanging pipe type/ diameter		mm	Evaporator: 7 condenser: 7	Evaporator: 7 condenser: 7	
Fin material			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.

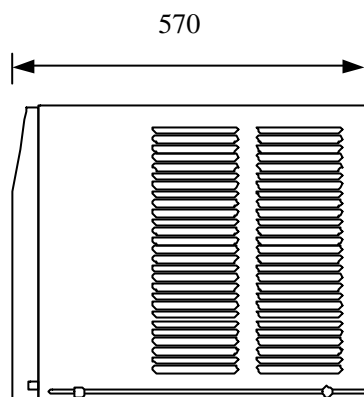
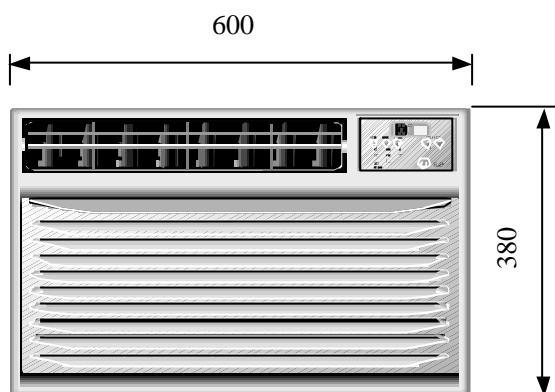
Adapter Plug: We strongly advise against using an adapter plug.

Important: Test power plug before each use:

1. Press "reset" button.
2. Press "test" button, unit should trip.
3. Press "reset" button again for use.

Do not use if above test fail.
In the event this device trips, the cause of the malfunction is to be corrected before further use of the device.

Net Demention



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.

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.

⚠ 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.

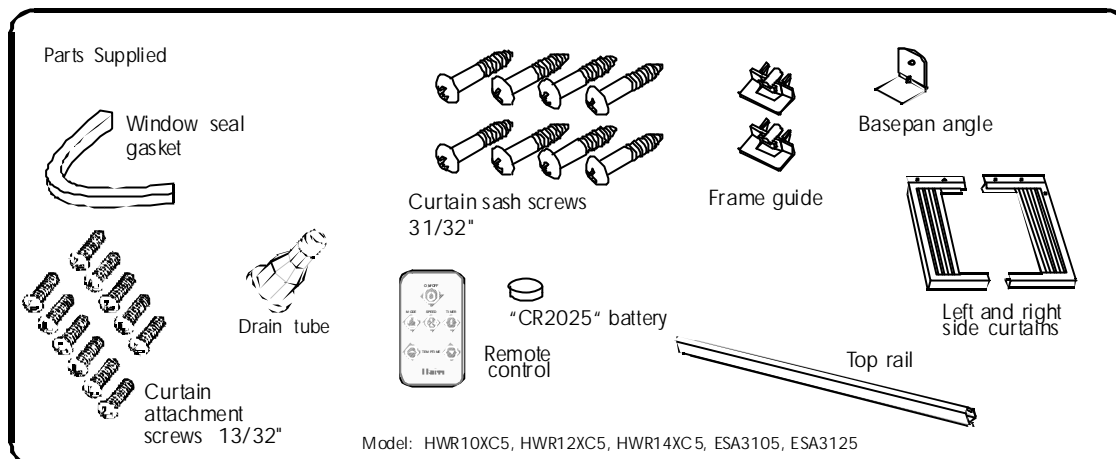
⚠ 9) DO NOT modify the plug or the electrical wall outlet in any way.
If plug does not fit the electrical outlet have a certified electrician do the necessary change.

⚠ 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) 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.

Parts



Tools

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

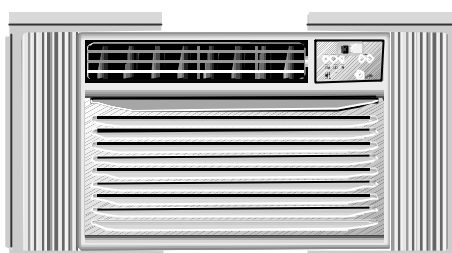
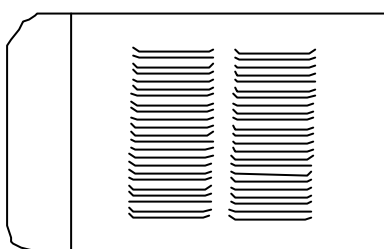
- Scissors
- Phillips Screwdriver
- Standard Screwdriver
- Pliers
- Wrench
- Drill and Drill Bits
- Tape Measure
- Gloves
- Level
- Sockets

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.



HWR10XC5 ,HWR10XC5-T, HWR12XC5 ,ESA3105, ESA3125

Model Dimension	HWR10XC5 ,HWR10XC5-T, HWR12XC5 , ESA3105, ESA3125
A(inch)	8 $\frac{21}{32}$ "
B(inch)	15 $\frac{9}{16}$ "
C(inch)	15 $\frac{9}{16}$ "
D(inch) Max	40 $\frac{5}{32}$ "
D(inch) Min	26 $\frac{3}{4}$ "
Case High	14 $\frac{31}{32}$ "
Case Width	23 $\frac{5}{8}$ "
Case Depth	20 $\frac{21}{32}$ "

Models HWR10XC5, HWR10XC5-T, HWR12XC5, ESA3105, ESA3125

1 PREPARE UNIT FOR INSTALLATION-1

Unpack unit on floor next to installation location.
1. Open the inlet grille by pulling the exposed door on the top of the unit and remove the screw which fasten the front panel. (Fig. A)
2. Remove the front panel and rotate it to B position. Separate operation panel from the front panel by pushing the tabs. (Fig. B)

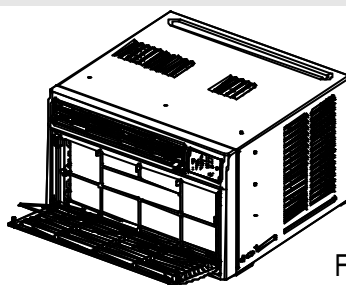


Fig.
A

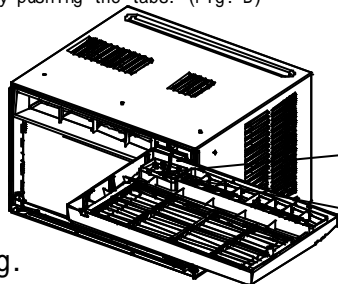
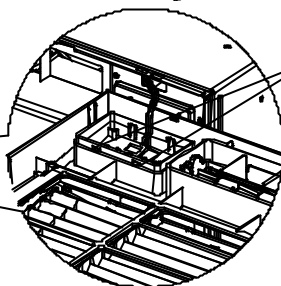


Fig.
B



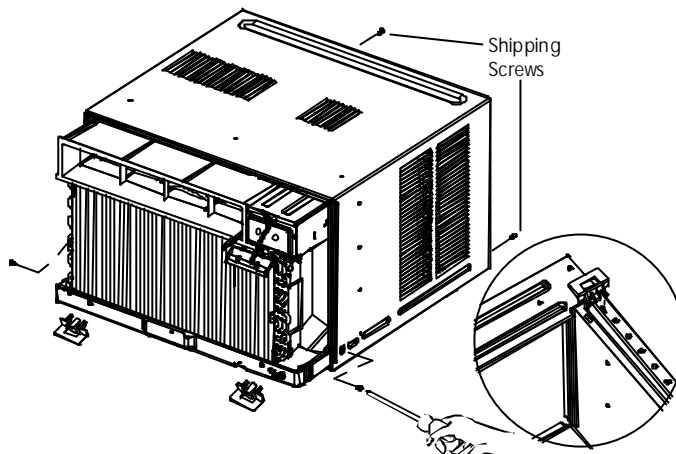
Tabs

Installation and Accessory Parts

2 PREPARE UNIT FOR INSTALLATION-2

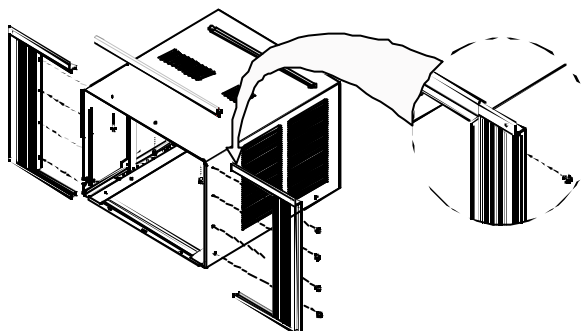
1. Remove the screws which fasten the cabinet at both sides and at the back.
2. Slide the unit from the cabinet by gripping the base pan handle and pulling forward while bracing the cabinet.
3. Insert the Frame Guide into the bottom of the cabinet.

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



3 ASSEMBLE CURTAINS/TOP RAIL

Install top rail with three 13/32"screws. Slide left-hand curtain assembly into left end of top and bottom rails. Repeat for right-hand curtain assembly. Fasten curtain retainer strips to sides of outer case with eight 13/32" screws.



4 PREPARE WINDOW FOR INSTALLATION

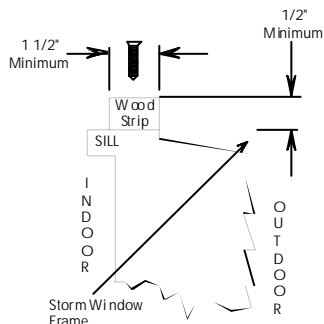
Inspect window track, sash, and sill for its ability to support the weight of air conditioner.

Measure width between window moldings to ensure Instant Mount will fit window frame. Instant Mount models are designed for windows wide (the detail see page 15)

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.

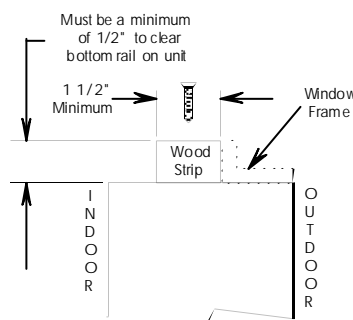
Storm window installation

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

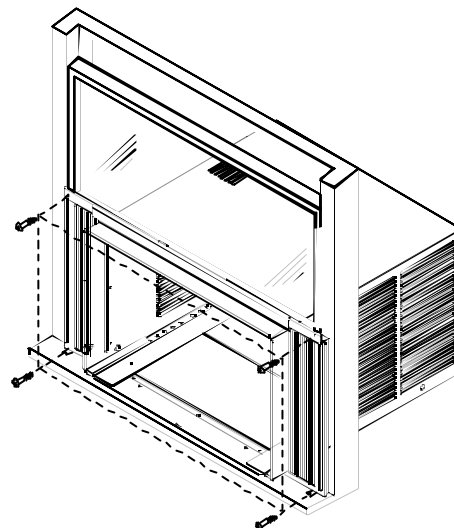
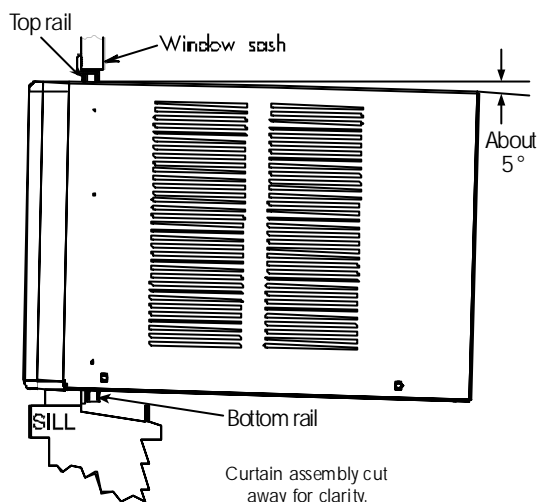
Add wood strip (at least 1 1/2" wide) along entire width of window sill. Thickness of wood strip should match height of front lip on window frame. Fasten wood strip to sill with a minimum of three countersunk wood screws (not supplied with kit). This provides a smooth surface for mounting air conditioner.



Installation and Accessory Parts

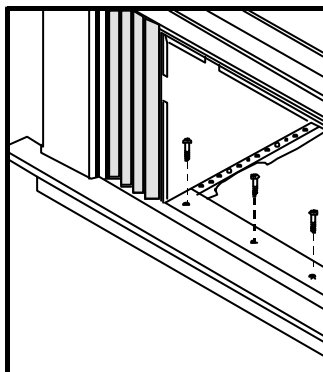
5 INSTALL OUTER CASE IN WINDOW

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



Expand both curtains to contact the window frame. Attach each curtain the window sash using 3/16" screws.

NOTE: To make screws easier to drive, drill a pilot hole into sash through clearance hole in curtains.



Use 3 screws(3/16") to fix the case to windows sash.

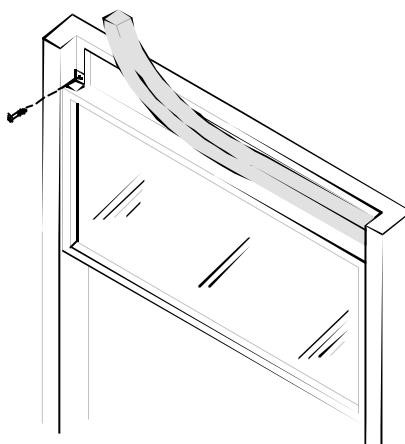
Installation and Accessory Parts

6 INSTALL SASH BRACKET & SEAL GASKET

Install sash bracket on top of indoor window sash with one wood screw 3 1/32" to prevent raising of window from the outside. Screw anchor directly into side of window frame. For hard wood or metal window frames, drill a pilot hole to start screw.

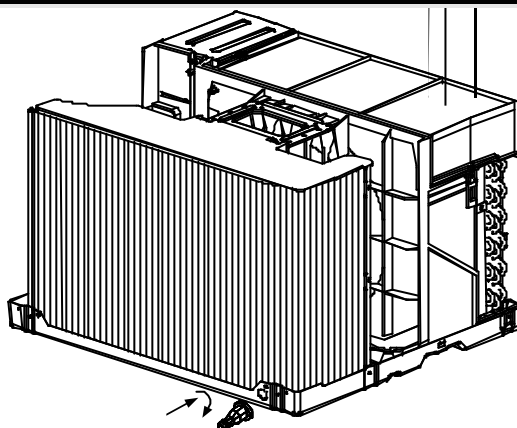
Important: Be careful not to drill pilot hole too deep. Add a piece of tape to the drill bit as a depth gauge. Also stay clear of glass. Be careful not to damage the function of the window.

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



7 INSTALL DRAIN TUBE

The base pan may overflow due to high humidity. You must install the drain tube before using the unit. Adjust the direction of the drain tube to make it be in line with the hole in the rear of unit; Insert the drain tube into the hole and twist 90°. To drain the excess water to indicated position, connect a drainpipe to the drain tube. When pressing the drain tube or drainpipe into place, apply force in the direction away from the fins to avoid injuring yourself.



8 RETURN CHASSIS TO OUTER CASE

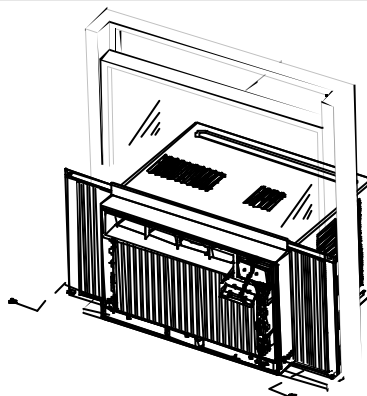
Find someone to help you replace chassis in outer case. Replace front panel, and grille. (Don't forget to install the attachment screws before replacing grille)

Caution:

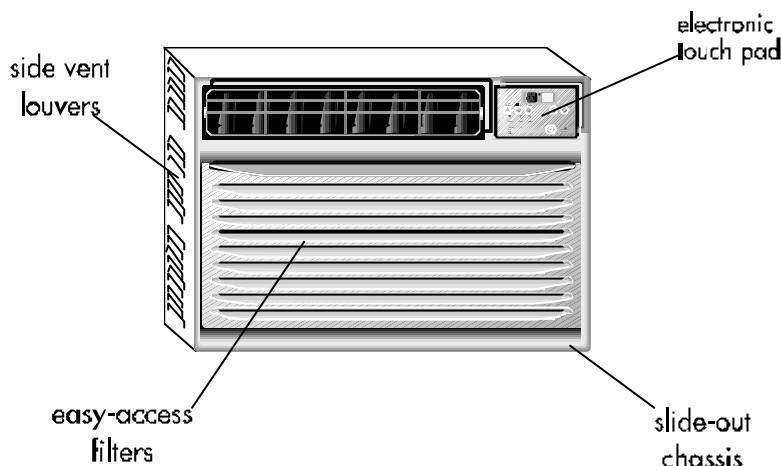
For security purpose, reinstall screws at cabinet's sides.

Important:

Because window sash helps keep unit in window, make certain window sash contacts outer case before reinstalling chassis.



Parts and Functions



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

With this you can control the fan speed as well as the A/C (cooling) speed.

You have 3 levels of A/C Speed for you to set at your desired level. LO will circulate air at the lowest velocity, MED at medium velocity and HIGH will circulate at the maximum.

You have 3 levels of Fan Speed to set at your desired comfort level. HIGH, MED and LOW.

3. Function.

Your air conditioner has 3 Functions.

a) A/C.

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

b) Dehumid.

This enables your air conditioner to operate as a dehumidifier as well. It will remove the excess moisture from the air to keep your room at a

comfortable dry stage. You can use this feature alone in case you do not desire to use the air conditioner.

c) Fan Only

You can run the fan only on not so hot days. The fan can be set to run at 3 speeds (HIGH fan, MED fan, LOW fan) as desired by you.

4. Energy Saver

When turned "ON" the fan will shut off 3 minutes after the compressor cycle off. This will not only save you electrical and energy costs but also shuts off the unnecessary noise of the fan motor running. In the "OFF" position the fan will not shut off when the compressor cycles off. The fan will keep running at the set level.

5. Timer

Your air conditioner can be set to go on or off at your desire. This can be done up to 24 hours in advance.

6. 4 Way Air Flow

These air directional louvers let you control the direction of the airflow in your required direction. The airflow can be directed up – down – right side – left side.

Parts and Functions

7. Vent

The Fresh Air Vent allows the air conditioner to recirculate inside air, draw fresh air into the room and exhaust stale air to the outside .

8. Slide Out Chassis

Your Air Conditioner becomes more versatile with this feature. You have the option to install the unit in a window or the wall.

9. 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.

10. 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.

11. 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.

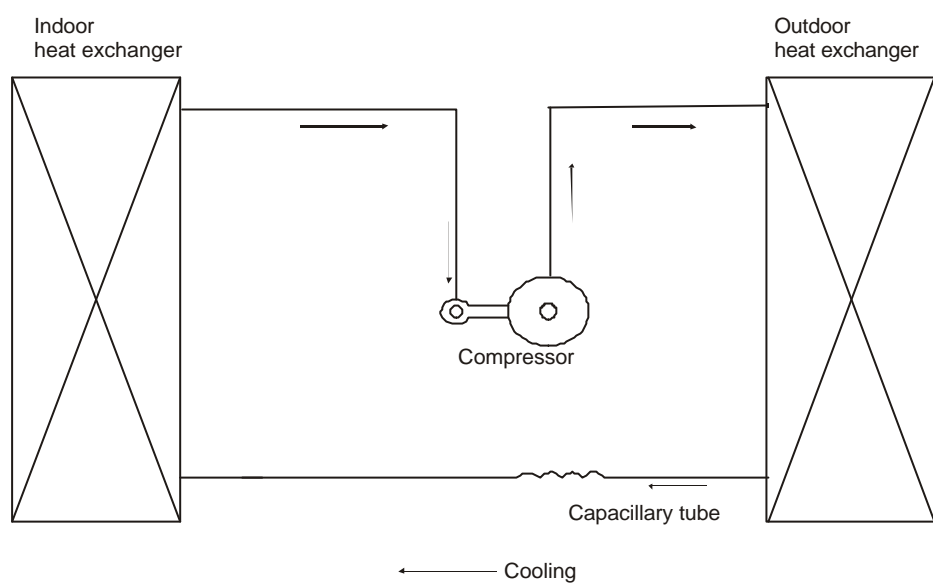
12. Electrostatic Filter (not all models)

Being constructed of high efficiency purifying substance, active carbon fabric, electrostatic fabric, electrostatic active carbon net and other materials it purifies the air effectively. Its wavy structure increases the capability to filter dust and smoke effectively. Due to the retention of the active carbon it has a high purifying speed capable of strong airflow.

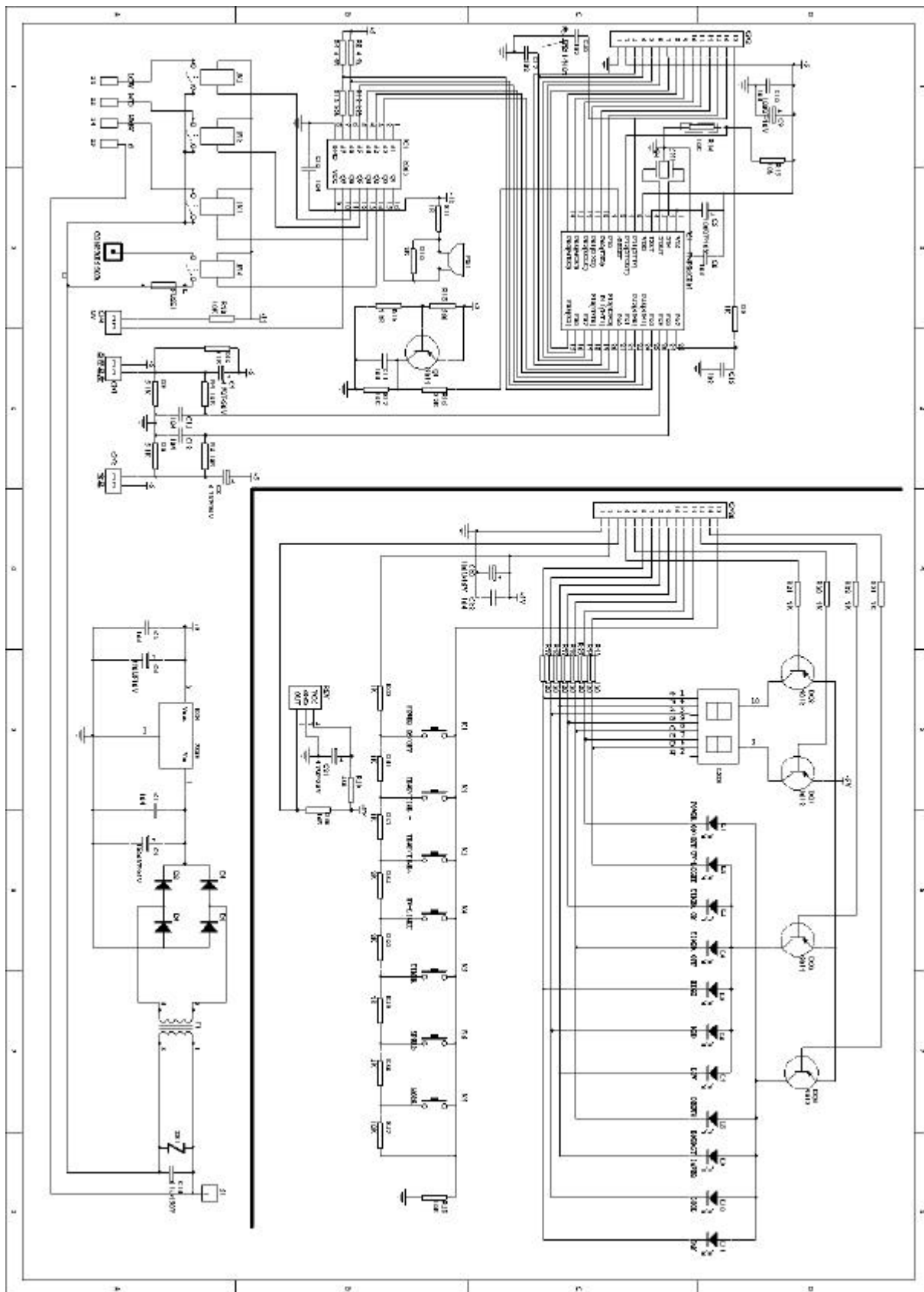
Abnormity Diagnose

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.

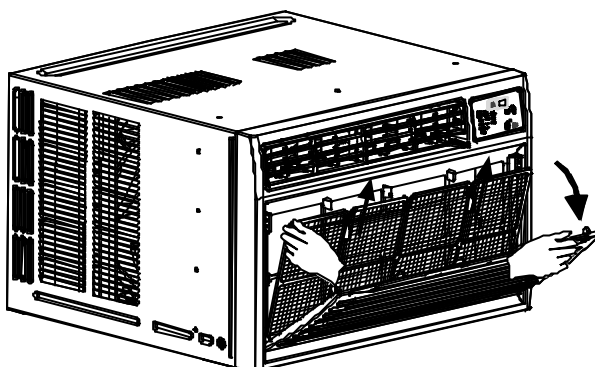
System Flow Chart



Circuit Diagram



Maintenance Service and Trouble Shooting



- **Always unplug your air conditioner before cleaning.**
- The air filter behind the inlet grille should be checked and cleaned at least once every 2 weeks (or as necessary) to maintain optimal performance of the air conditioner.

How to remove the air filter

1. The grille may be opened from the top for easy maintenance after installation.
2. Open the inlet grille by pulling off the exposed door on the top of the unit(based on the installation).
3. Pull the tab slightly to release the filter. Pull the filter in the same direction as the opening.
4. Clean the filter with warm, soapy water. The water should be below 40°C(104°F).
5. Rinse off and gently shake off excess water from the filter. 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 may dissolve, damage and/or discolor your air conditioner.
- **Always use a soft cloth dampened with water or mild soap and water solution to wipe the front of the cabinet.**
Wipe dry with a soft cloth.

Maintenance Service and Trouble Shooting

- To store your air conditioner, after the season, remove the unit from the window as per the installation guide. Repack the unit in its original box and store away. If your unit is installed in a wall or you do not intend to remove it from the window then cover the outside with a winter cover. This can be purchased from the retailer where you purchased your air conditioner or from your local hardware store.
- Before putting away your unit make sure any water left in the pan is removed and drained away. Water left in the pan could lead to Rusting or damage to the electrical connections.

TroubleShooting

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.

Air from air conditioner is warm:

The COOL setting may need to be raised.

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.

Air conditioner working but room not cooling:

Room may have appliances that produce heat. Use an exhaust fan to remove excess heat.
Redirect the airflow Remove any obstacles.
All doors and windows need to be closed so cool air does not escape the room.
Air filter may need cleaning.
Unit BTU may be too low for the required cooling area.
On extreme hot & humid days air conditioners may take a little longer to cool
Vent may be in the open position. Vent has to be closed for optimum cooling.

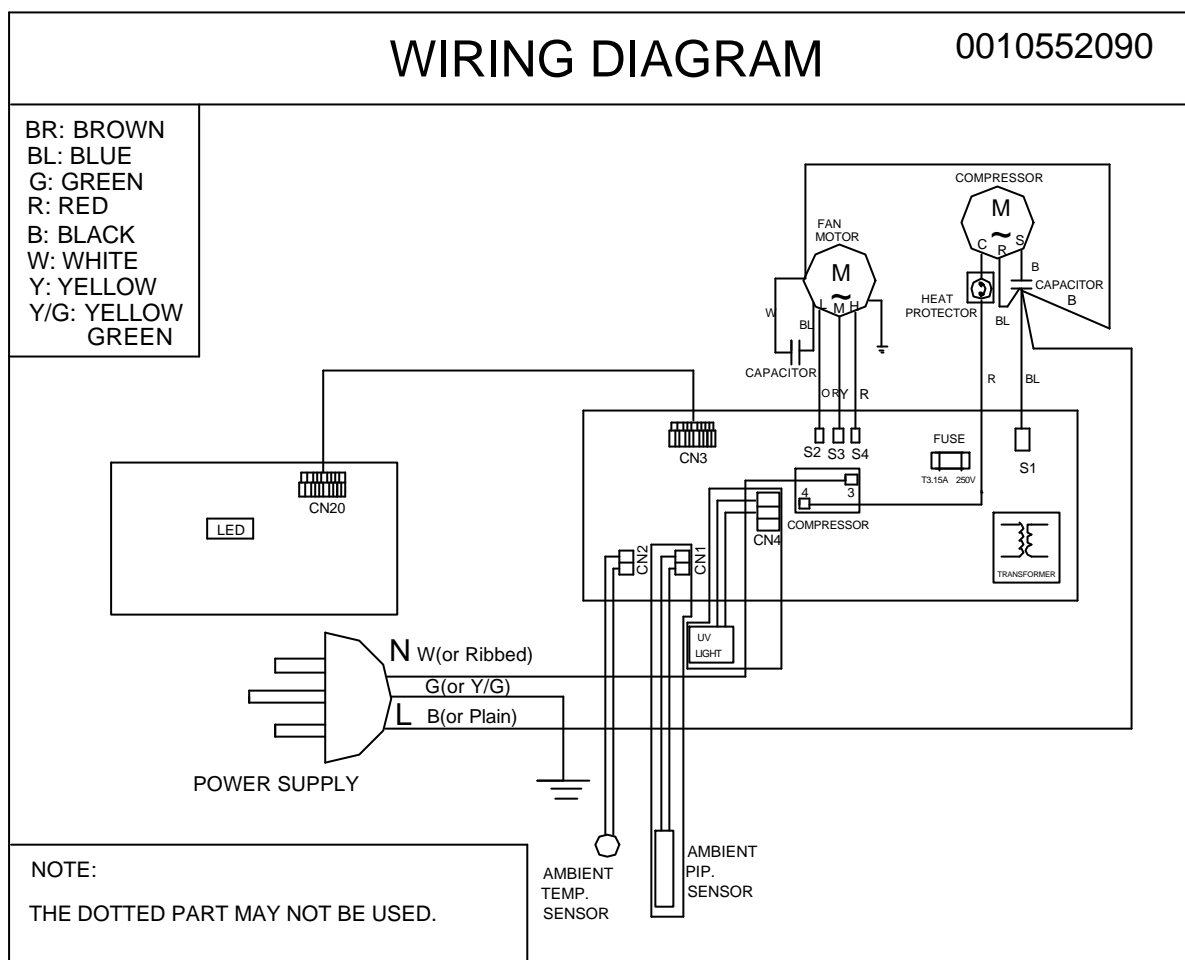
Air conditioner is making noise when cooling:

You may hear sounds of air movement, water, compressor clicking on and off or window vibrations. Read Operating Guide- Normal Operating Sounds. (See page 8)

Water in the air conditioner cabinet:

This is normal as your air conditioner not only cools but also dehumidifies the air. If there is water dripping inside the room, check the installation of the unit. The unit may need to be reinstalled. (See page 17)

0010552090





Domestic Air Conditioner

Model: HWR10XC5 HWR10XC5-T
HWR12XC5 ESA3105 ESA3125

Sincere Forever

Haier Group
