Haier SERVICE MANUAL

Order No.AC0907S005V0

Model No.EST12VCM

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Feature

- Top Discharge Airflow Pattern
- Modern Family-look Design
- 3 Cool Settings, 3 Fan Settings
- Easy-to-ins tall Mounting Kit
- Easy-Access Washable Filter
- Digital Time & Temperature Display
- 24 Hour on/off Timer

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death

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1. Product Code Illumination and Series Introduction

1). Model identification:



- A: Abbreviation of Energy Star
- B: Through the wall
- C: Nominal cooling capacity (BTU/h) with the first two numbers based on one thousand unit
- D: The type of power supply
 - X 115V / 60HZ

V - 230V/208V / 60HZ

- E: Function code
 - C Cooling only
 - H Heating pump or Electric heater
- F: Design code

Examples:

EST12XCM

It represents remote control through the wall conditioner. Cooling capacity is 12000/11600 BTU/h and the power supply is 208/230V / 60Hz.

2). Standard situation/conditions

No. Operatir	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. Specification

		Item	Unit	EST12VCM	
Cooling capacity		BTU/h	12000/11600		
Heati	Heating capacity		BTU/h	1	
Powe	r supply			1PH/208-230V/60 Hz	
Cooling		Power input	W	1225/1184	
		Running current	A	5.3/5.7	
		EER	BTU/(h·W)	9.8	
		Power input	W	1	
Heati	ng	Running current	A	/	
		COP	BTU/(h·W)	/	
Cours		Indoor side	dB(A)	60	
Sound	d Level	Outdoor side	dB(A)	64	
		Height	inches	14 18/32	
Net d	imensions	Width	inches	24 1/32	
		Depth	inches	19	
_ .		Height	inches	16 17/32	
Packaging dimensions		Width	inches	28 3/4	
aimer	ISIONS	Depth	inches	27 5/16	
Weight		Net	lbs	87.6	
		Gross	lbs	96	
Compressor		Туре		Rotary	
		Model	/	44A282AG&05KC	
		Running cap. For comp.	μF	6	
Deco		Hi-Pressure	Psig	540	
Press	ure	Low-Pressure	Psig	270	
Refrigerant		Model	R22 or R410A	R410A	
		Charge	OZ	18	
	Туре	Indoor unit	/	centrifugal	
Fan		Outdoor unit	/	axial	
	Fan Speed	Indoor unit	r/min	1500/1425/1325	
Air vo	lume	-	CFM	268/245/230	
Moist	Moisture removal		Pints/hr	5.3	

3. Safety and Precaution

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 .

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 damage . Also avoid using 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 property to prevent it from falling.Extra brackets or support may be required depending on your window.

6) Do not black 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 .

4.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.



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 proper 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.

5. Installation

Remove old air conditioner and inspect sleeve for the following:

Insallation--Make sure that sleeve is securely installed and in sound structural dondition.

Dimensions--Measure the size to make sure the air conditioner will fit.

Slope--There should be a rearward slope for condensate to drain from the rear of the sleeve. Chece against Fig.A.



Manufacturer--So the method of installation can be determined. If the installation and slope are suspect, then removal and correct installation of a Haier Wall Sleeve, is recommended. Check the conetents of the accessories supplied with your air conditioner



Number	Part name	QTY.
1	Wide Top/Bottom Trim Frame	2
2	Wide Side Trim Frame	2
3	Narrow Top/Bottom Trim Frame	2
4	Narrow Side Trim Frame	2
5	Foam Seal	1
6	Universal Fit Rear Grille	1
7	Screw	4
8	Washer	4
9	Tapered Spacer Block	2
10	Board	1

How to install

1. Identify the existing wall sleeve before installing the unit from the insted below.

Brand	Wall Sleeve Dimensions(inches)			
Dialiu	Width	Height	Depth	
Haier Amana	25-13/32	15-3/4	17-1/2	
Haier Amana	25-7/8	15-9/16	16-3/4	
White-westinghouse Frigidaire Carrier(52F series)	25-1/2	15-1/4	16,17-1/2 or 22	
General Electric /Hotpoint	26	15-5/8	16-7/8	
Whirlpool	25-7/8	16-1/2	17-1/8	
Fedders/Emerson	27	16-3/4	16-3/4 or 19-3/4	
Sears/Kenmore	25-7/8	15-17/32	16-23/32	
Carrier(51S series)	25-3/4	16-7/8	18-5/8	
Emerson/Fedders	26-3/4	15-3/4	15	
Friedrich	27	16-3/4	16-3/4	
LG	25-7/8	15-17/32	16-23/32	

Note:All wall sleeves used to mount the new Air Conditioner must be in sound structural condition and have a rear grille that securely attaches to sleeve, or rear flange that serves as that securely attaches to sleeve, or rear flange that serves as a stop for the Air conditioner.

2.Clean the interior of the sleeve (do not disturb seals).

3.Repaint the sleeve if needed.

4.On 25 13/32"-26" sleeves: Replace the existing louvered grille with the new one supplied in the package, shown in the Fig.B



Fig.B

Mounting tabs can be bent or cut off if not needed.Please use the correct holes to match the sleeve. On 26 3/4°-27" sleeves:Use existing rear grille and redirect louvers to 60 angle as shown in Fig.C



5. If the depth of your existing wall sleeve is less than or equal to 20", skip to step 7. Otherwise, cut the baffles and the support blocks according to length "A" in the table below.

Depth"D" of the existing wall sleeve(inches)	Length"A" (inches)	A
20 <d≼205⁄ 8<="" td=""><td>3⁄4</td><td></td></d≼205⁄>	3⁄4	
205⁄8 <d≼213⁄4< td=""><td>1-3⁄4</td><td></td></d≼213⁄4<>	1-3⁄4	
21¾ <d≤24< td=""><td>4</td><td>Fig.D</td></d≤24<>	4	Fig.D

6.Remove the backing from the support blocks and attach them to the inside of the wall sleeve as shown FIG E.Slide the baffle into solts of the support blocks.



7.Install the new unit into the wall sleeve.

8.Install the 1"x1 1/2'x84"long stuffer seal between the wall sleeve and the unit.

9.To assemble trim, snap the tab of each piece into the slot of the other piece as shown below.2-Trim frames are supplied with unit.use the trim frame that best fits your sleeve. Slide trim over the front of the air conditioner until trim is flush with sleeve as shown below.



Note:Be sure to route the cord through the trim frame before placing the trim frame on the unit.

6. Parts and Functions



MODE

- 1. Press mode until you see the indicator light come on next to the desired setting.
- 2. Choose Fan, Energy Save, Cool or Dehum.
- Fan—Only the fan runs. Press SPEED to select High, Med or Low fan speed. The display shows the current room temperature.
- Energy Save—In this mode the fan runs only when cooling is needed. The fan will run for 3 minute after the compressor shuts off. The fan then cycles on for 1 or 2 minutes at 10 minute intervals until the temperature in the room is above the set temperature. The compressor then turns back on.
- Cool—Cools the room. Press SPEED to select High, Med , Low speed. Press the TEMP/TIME up or down
 arrow button to adjust the temperature.
- Dehum—Aids in removing humidity from the room. This setting will NOT cool the room.

SPEED

- 1. Press FAN SPEED until; you see the indicator light come on next to the desired setting.
- 2. Choose High, Med, Low
 - High—For maximum cooling
 - Med—For normal cooling
 - Low—For minimum cooling

TIMER

To set the air conditioner to turn off between 1 hour and 24 hours (The air conditioner must be ON to set):

- 1. Press TIMER. Timer Off indicator light will flash. The display will show the remaining hours before the air conditioner will turn off.
- 2. Press the TEMP/TIME up or down arrow button to change the delay time from 1 hour to 24 hours.
- 3. After 5 seconds, Timer Off indicator light will remain on. The display will show the left time to Timer OFF or the current temperature.

To set the air conditioner to turn on between 1 hour and 24 hours:

- 1. Press TIMER. Timer On indicator light will flash. The display will show the remaining hours before the air conditioner will turn on.
- 2. Press the TEMP/TIME up or down arrow button to change the delay time from 1 hour to 24 hours.
- 3. Timer On indicator light will remain on.

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TO CLEAR TIMER PROGRAM:

NOTE: Air conditioner can be either on or off. Press TIMER until Timer indicator light turns off.

TO VIEW OR CHANGE THE REMAINING TIME (IN HOURS):

TIMER OFF

- 1. Press the TEMP/TIME up or down arrow button to increase or decrease the time.
- 2. After 5 seconds, the display will show the remaining time to Time OFF or the current temperature.

TIMER ON

- 1. The display will show the remaining time.
- 2. Press the TEMP/TIME up or down arrow button to increase or decrease the time.
- 3. After 5 seconds, the display will show the remaining time to Timer ON.

TEMP/TIME

- 1. Press the TEMP/TIME up arrow button to raise the temperature. Each time you press the TEMP/TIME up arrow button, the temperature will go up 1°F until it reaches 86°F (30°C).
- Press the TEMP/TIME down arrow button to lower the temperature. Each time you press the TEMP/TIME down arrow button, the temperature will go down 1°F until it reaches 61°F (16°C).
- NOTE: After 5 seconds under Fan mode the display will show the current temperature under Cool, Energy Save or Dehum mode the display will show the set temperature.

FILTER RESET

This feature automatically notifies you that the air filter must be cleaned. The indicat or light will come on after 240 hours of operation.Clean the air filter(refer to Care and Cleaning),place it back in the front panel, and press the Filter Reset button. The light will turn off.

Using the Remote Cotrol



Remote control may differ in appearance from the image shown.

NOTE: Remove and discard protective film prior to use. The remote control runs on one CR2025 battery (included). Replace battery after 6 months of use, or when the remote control starts to lose power. To change battery, first remove screw on back panel of remote.

POWER

Press ON/OFF to turn on the air conditioner.

Mode

Press MODE to choose Fan, Energy Save, Cool or Dehum.

Speed

Press SPEED to choose High, Med, Low.

TIMER

To set the air conditioner to turn off after a set amount between 1 hour and 24 hours (unit must be ON):

- 1. Press TIMER. Timer OFF indicator light on the air conditioner control panel will flash.
- 2. Press the TEMP/TIME up or down arrow button to change the delay time from 1 hour to 24 hours.
- 3. After 5 seconds, Timer OFF indicator light on the air conditioner control panel will remain on.

To set the air conditioner to turn on between 1 hour and 24 hours:

- 1. Press TIMER. Timer On indicator light on the air conditioner control panel will flash
- 2. Press the TEMP/TIME up or down arrow button to change the delay time from 1 hour to 24 hour s.
- 3. After 5 seconds, Timer On indicator light on the air conditioner control panel will remain on.

TO CLEAR TIMER DELAY PROGRAM:

NOTE: Air conditioner can be either on or off. Press TIMER until Timer indicator light turns off.

TO SEE OR CHANGE THE REMAINING TIME (IN HOURS):

TIMER OFF:

- 1. Press the TEMP/TIME up or down arrow button to increase or decrease the time.
- 2. After 5 seconds, the display on the air conditioner control panel will show will show the remaining time to Timer Off or the current room temperature.

TIMER ON:

- 1. Display on the air conditioner control panel will show remaining time.
- 2. Press the TEMP/TIME up or down arrow button to increase or decrease the time.

TEMP/TIME

- Press the TEMP/TIME up arrow button to raise the temperature. Each time you press the TEMP/TIME up arrow button, the temperature will go up 1°F until it reaches 86°F (30°C).
- Press the TEMP/TIME down arrow button to lower the temperature. Each time you press or hold the TEMP/TIME down arrow button, the temperature will go down 1°F until it reaches 61°F (16°C).

CHANGING THE AIR DIRECTION

The air directional louvers let you control the direction of the airflow. The airflow can be directed up-down or left to right.



A. 4-way Air Flow

7. 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, is the sampling value is defferent 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.



8. System Flow Chart



9. Circuit Diagram

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10. Wiring Diagram



Sincere Forever

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