



AP420HS
Portable Air Conditioner
Owner's Manual

This owner's manual provides instructions on safe installation, use, and maintenance. Please read it carefully and save it for reference.



Safety Instructions

Improper handling can cause serious damage to the appliance and/or to the user.

This portable air conditioner is not intended for use by children. Children should be supervised to ensure that they do not play with this product.

Electrical Safety

1. This unit is designed for indoor use only.
2. Do not use the unit in extremely humid or wet environments.
3. Do not wet the housing or control panel.
4. Do not pull the unit by the cord.
5. Always turn the unit off and unplug it from the socket when cleaning.
6. Unplug the unit if it is not going to be used for a long period of time.
7. Do not operate the unit with a damaged plug or a loose socket.
8. Use only the correct power supply with appropriate amperage.
9. If the power cord is damaged, it must be replaced by the manufacturer, a service agent, or qualified technician.
10. Do not remove any part of the casing unless instructed by an authorized technician.

General Safety

1. This portable air conditioner is not intended to be used by children.
2. Do not allow children to play with the controls or drop any objects into the exhaust air outlets or vents.
3. Do not place objects or let any person sit on top of the unit.
4. Only use in the upright position on a flat, level surface and provide at least 20 inches of clearance from any walls or objects.
5. Route the power cord carefully to avoid a tripping hazard.
6. This unit is intended for domestic use only. Do not use the portable air conditioner for industrial or commercial use. Any other use may invalidate the warranty.

Your portable air conditioner is supplied with a Leakage-Current Detection and Interruption (LCDI) safety plug. This device provides protection to reduce the risk of fire due to arcing faults in the power supply cord. Before using your portable air conditioner, follow the instructions below to ensure that the LCDI plug is working properly:

1. Plug the power cord to a grounded outlet.
2. Press the TEST button on the LCDI plug. This should cut the power to the air conditioner.
3. Press the RESET button to start using your air conditioner.

If the indicator remains lit after pressing the TEST button, please contact EdgeStar support.

DO NOT USE YOUR PORTABLE AIR CONDITIONER IF THE TEST FAILS.

Do not use the TEST and RESET buttons as an ON/OFF switch.

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Introduction

Thank you for purchasing this EdgeStar portable air conditioner. We are glad you chose us. We believe that your purchase of this product opens a relationship between you and EdgeStar. We will provide the customer support needed to nurture that relationship.

This manual contains important information regarding the proper installation, use and maintenance of your portable air conditioner. Following this manual will ensure that your product will work at its peak performance and efficiency.

Please save the original product packaging in case you need to safely transport your portable air conditioner.

For Your Records:

Please write down the model number and serial number below for future reference. Both numbers are located on the ratings label on the back of your unit and are needed to obtain warranty service. You may also want to staple your receipt to this manual as it is the proof of your purchase, and is also needed for service under your warranty.

Model Number: _____

Serial Number: _____

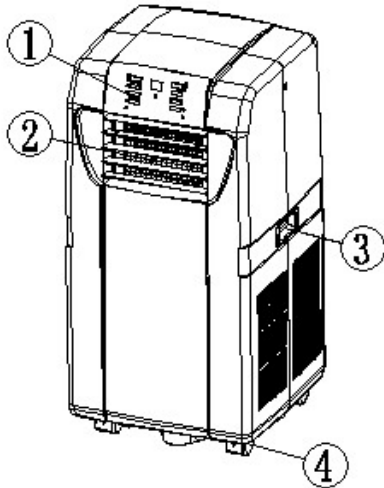
Date of Purchase: _____

To better serve you, please do the following before contacting customer service:

- If you received a damaged product, immediately contact the dealer that sold you the product.
- Read and follow this instruction manual carefully to help you install, use and maintain your portable air conditioner.
- Read the troubleshooting section of this manual as it will help you diagnose and solve common issues.
- Visit us on the web at <http://www.edgestar.com> for product guides, additional troubleshooting resources and up-to-date information. If you need service, our friendly customer service representatives are available via email at service@edgestar.com or by telephone at **1 (866) 319-5473**.

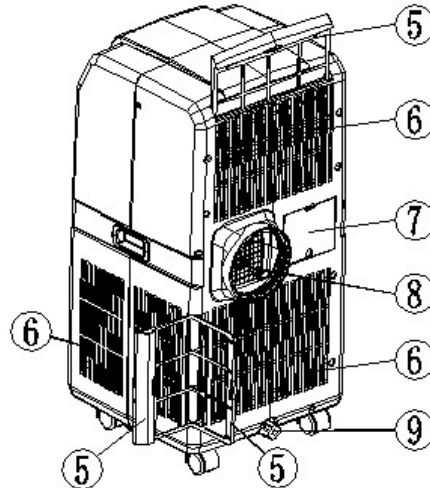
Parts Identification

Front



1. Control panel
2. Front air vent
3. Handle
4. Caster

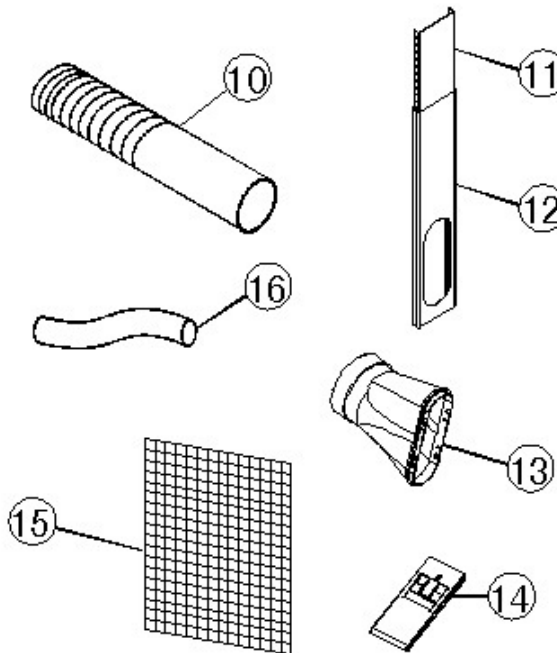
Back



5. Pre-filters
6. Air inlets (evaporator and condenser)
7. Power cord compartment
8. Exhaust air outlet
9. Water stopper/drainage point

Accessories

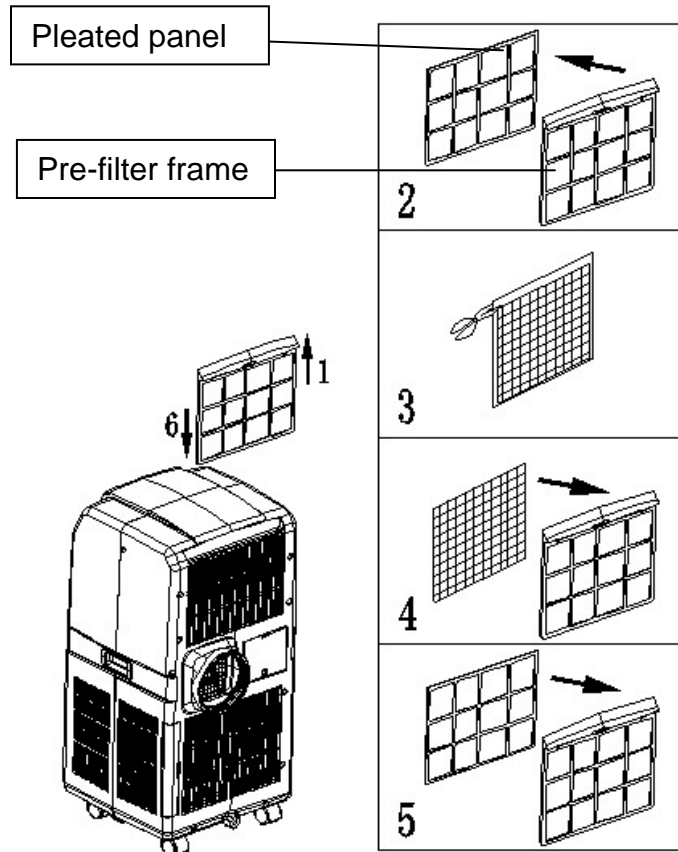
10. Exhaust hose
11. Window kit (part 2)
- for filling the open window space
12. Window kit (part 1) -
used to connect the exhaust hose and filling the remaining open window space
13. Oval adapter for insertion onto hose and into window kit
14. Remote control
15. Active carbon filter
16. Drain tube for continuous drainage



Installation – Activated Carbon Filter

Instructions to install the carbon filter

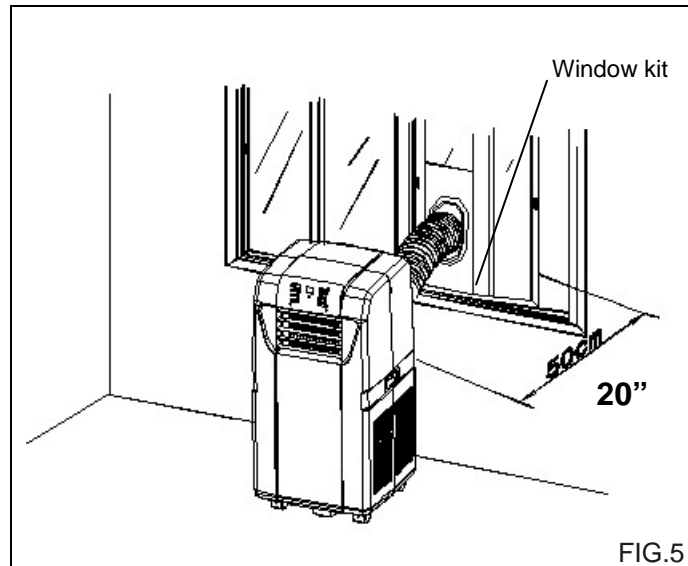
1. Remove the pre-filter frame from the unit.
2. Separate the pleated panel from the pre-filter frame.
3. Remove the activated carbon filter from its plastic bag.
4. Place the activated carbon filter into the pre-filter frame.
5. Secure the filter by reassembling the pleated panel to the pre-filter frame.
6. Install the pre-filter frame to the unit.



Note: Replace the activated carbon filter every 2-3 months or as needed.

Installation – Exhaust Hose

Follow the instructions below to install the window kit and exhaust hose.



1. Open the window and insert the window kit to cover the open gap. Next, slide the window across so that the kit is held securely. You may need to adjust the size of the window kit and secure it with screws. This technique may also be used for sash windows.
Note: Take care to secure your window against intruders.
2. Thread the exhaust hose to the Exhaust air outlet of the portable air conditioner.
3. Thread the oval adapter to the exhaust hose.
4. Attach the adapter to the window kit.

Installation – Exhaust Hose

Use the hose provided and attach the exhaust hose to the back of the air conditioner.

Avoid kinks and bends in the exhaust hose as this will cause the unit to work less efficiently. Improper setup may cause the unit to overheat and shut off. Figs. 6 & 7 show the correct position.

The hose may be extended from 11” to 59.” For maximum efficiency use the shortest length possible.

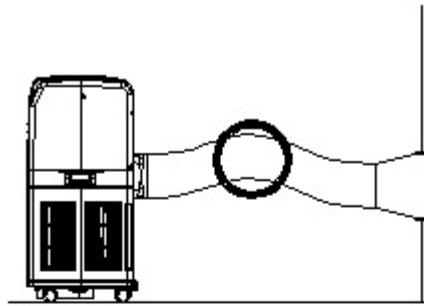


FIG.6

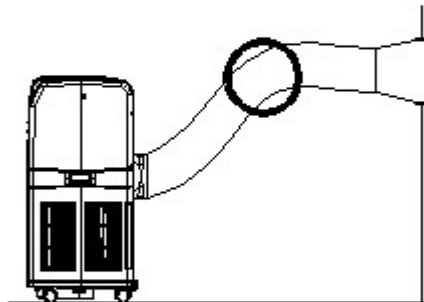


FIG.7

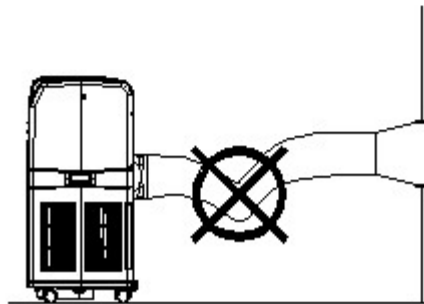


FIG.8

WARNING!

The length of the exhaust hose is specially designed according to the specification of this product. Longer hoses are not recommended.

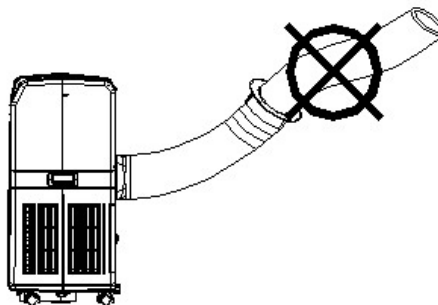


FIG.9

Operation – Using the Control Panel

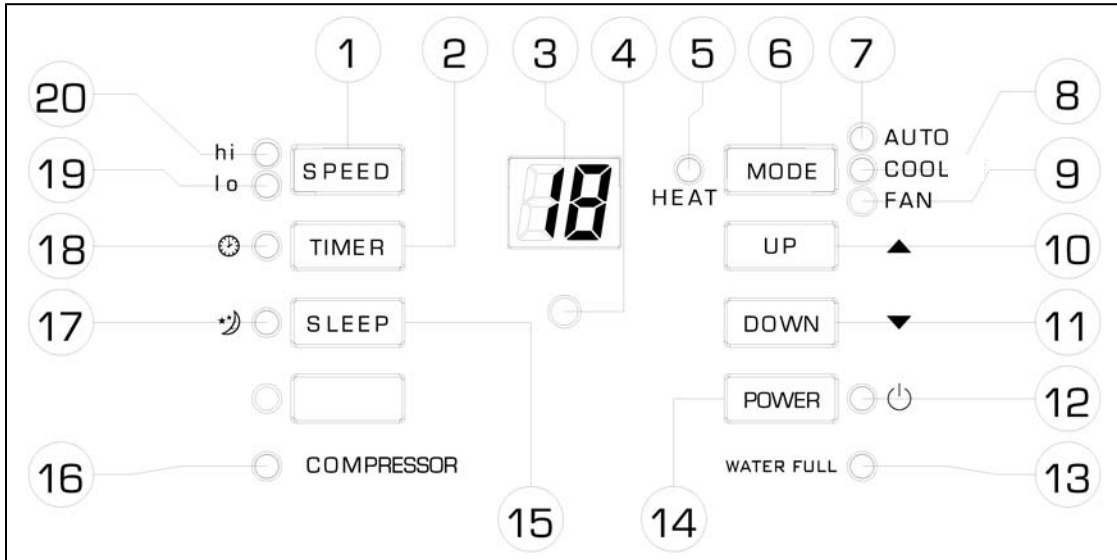


FIG.10

- | | |
|------------------------------|------------------------------|
| 1. Fan speed button | 11. Temperature down button |
| 2. Timer button | 12. Power indicator |
| 3. Display window | 13. Water full indicator |
| 4. Sensor for remote control | 14. Power button |
| 5. Heat mode indicator | 15. Sleep mode button |
| 6. Mode (function) button | 16. Compressor indicator |
| 7. Automatic mode indicator | 17. Sleep mode indicator |
| 8. Cooling mode indicator | 18. Timer indicator |
| 9. Fan mode indicator | 19. Low fan speed indicator |
| 10. Temperature up button | 20. High fan speed indicator |

Turning the Unit On or Off

Press the 'POWER' button and the unit will start in auto mode. If the ambient temperature is:

- Higher than 73° F, the unit will operate in cool mode.
- Higher than 68° F but below or equal to 73° F, the unit will operate in fan mode.
- Below 68° F, the unit will operate in heating mode.

An indicator will display next to the corresponding mode.

*NOTE: The display window shows the ambient room temperature from 32° F to 122° F

To turn the unit off, press the Power button again.

Selecting Between Automatic, Cooling, Heating, or Fan Modes

Press the MODE button to select the desired mode: automatic, cool, heat or fan.

The indicator of your selected mode comes on.

Operation – Using the Control Panel

Setting the Temperature

1. Press the 'UP' or 'DOWN' buttons to set the temperature you desire.
2. The display window will show the temperature you set as you press the 'UP' or 'DOWN' buttons. Otherwise, it will always show the ambient temperature.

The default temperature of this machine is: 75° F for cooling.

Note: Temperature control only works in cooling and heating modes.

Note: The temperature range for the heating function is 45 to 77° F. The temperature range for the cool function is 62 to 90°F. For temperatures outside these ranges, the unit may not work properly.

Setting the Fan Speed

1. Press the 'SPEED' button to toggle between high or low. The high or low indicator will light on.
2. If the unit is in 'AUTO' mode, it will choose the fan speed automatically according to the ambient temperature (the related indicators will light up). While in 'AUTO' mode, pressing the 'SPEED' button will have no effect.

Setting the Timer to Automatically Shut Off the Unit

While the machine is running, press the 'TIMER' button to set the number of hours you want to wait for the machine to shut off automatically. You are able to set the time between 1 to 24 hours by continuing to press the 'TIMER' button. The timer indicator will light up. When the time set has elapsed, the machine will turn off automatically. The display window will show the hour(s) you set as you press the 'TIMER' button. If the timer is not engaged, the unit will work continuously.

Setting the Timer to Automatically Power-On the Unit

While the machine is turned off, you can set the machine to power on by pressing the 'Timer' button, and setting the desired time. For example, if you set the timer to '2', the unit will automatically turn on after 2 hours.

Note: You can also select which mode you would like the unit to start in while you set the timer.

Sleep Mode

1. While in cooling mode, pressing the 'SLEEP' button will increase the set temperature 1°F each hour for a maximum of two hours.
2. While in heating mode, pressing the 'SLEEP' button will decrease the set temperature by 1°F each hour for a maximum of two hours.

3. To turn off sleep mode, re-press the 'SLEEP' button, the setting temperature and fan speed will return to the pre-selected one.
4. The sleep function will automatically shut down the unit after 12 hours of continuous use.

Note: The sleep function is not available while the unit is in fan, or auto mode. Sleep mode is only available in cooling or heating mode.

Operation – Using the Remote Control

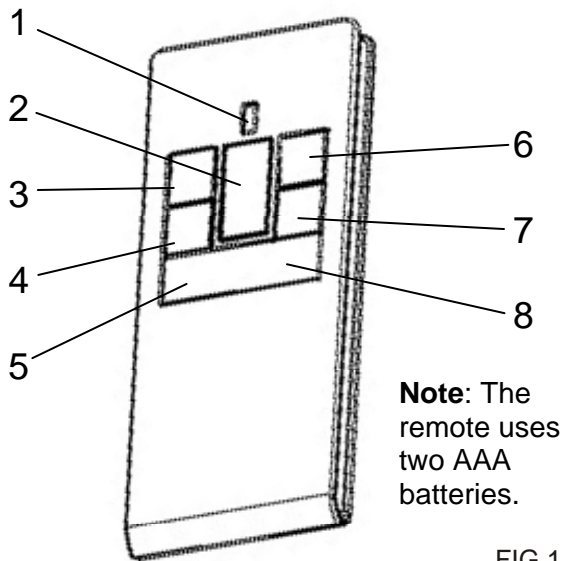


FIG.11

All the control panel functions can also be set with the remote control.

1. **LED Indicator** – Lights up when you press any of the buttons.
2. **Power Button** – Used to power the unit on or off
3. **Sleep Button** – Used to set the sleep function.
4. **Timer Button** – Used to set the timer function.
5. **Down Button** – Used to decrease the temperature.
6. **Mode Button** – Used to change between auto, cooling, heating, or fan modes.
7. **Fan Speed Button** – Used to set the fan speed.
8. **Up Button** – Used to increase the temperature.

NOTICE !

1. To prolong the compressor's life, please wait at least 3 minutes before turning the unit back on after shutting it off.
2. The cooling system will shut off if the ambient temperature is lower than the set one. The fan, however, keeps working on the set level. If the ambient temperature rises above the selected level, the cooling system will return to operation.
3. The heating system will switch off if the ambient temperature is higher than the set one. The fan, however, keeps working on the set level. If the ambient temperature drops below the selected level, the heating system will return to operation.
4. This machine is equipped with an ANTI-FROST function. While using the heating function in freezing weather, the heating function may stop blowing warm air, in order to melt frost. Once frost is melted the unit will return to blowing warm air out.

Maintenance – Water Drainage

This portable air conditioner is designed to exhaust most or all water dehumidified from the air. **In high humidity situations**, the internal water reservoir may fill. If the reservoir is full, both the compressor and motor will stop and the unit will buzz a warning (you can press any button to stop the buzzing). The “Water” indicator will flash to show you that the reservoir is full. The unit will not operate until you drain the water.

Please empty the water in one of the following ways:

1. Turn off the air conditioner (avoid moving it when full).
2. Position a container (a water tray, for example) underneath the drain hole.
3. Remove the drain cap & rubber plug from the drain hole and allow the water to drain out.
4. When the container is almost full, replace the rubber plug in the drain hole and empty the water tray.
5. Repeat steps 2 through 4 until the unit is emptied.
6. Replace the rubber plug and tighten the drain cap firmly.
7. Switch on the unit – the Water Full indicator will stop flashing and the unit will resume operation.

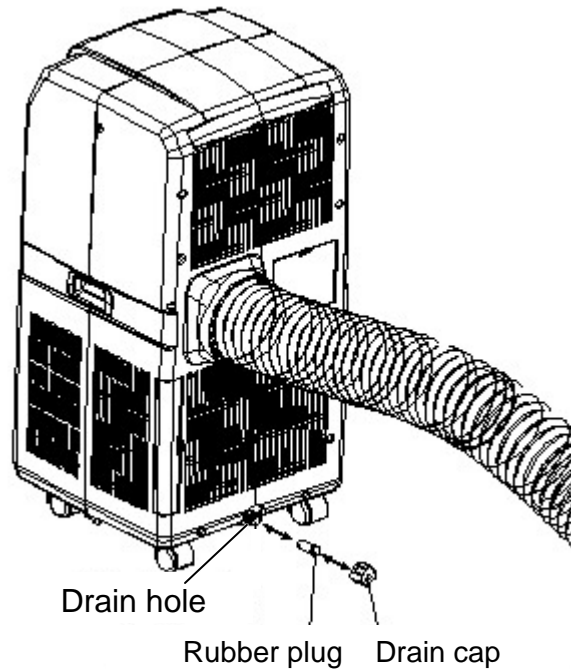


FIG.12

If you wish to operate the unit without the need to empty the water tank, please:

- Remove the drain cap and rubber plug and retain for future use.
- Connect the drain tube supplied to the water outlet as shown and locate the other end into a drain. (See the next page for more information.)

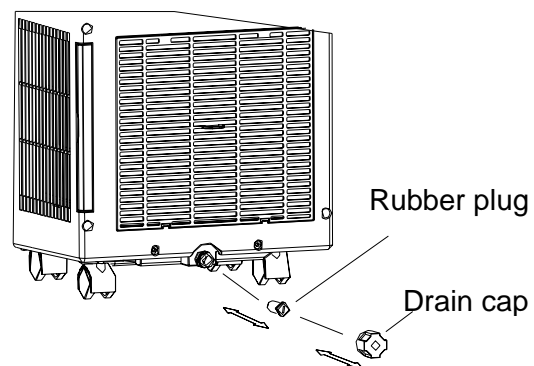


FIG.13

Maintenance – Extending the Drain Tube

The drain tube may be extended by adding an extension tube and using a suitable connector.

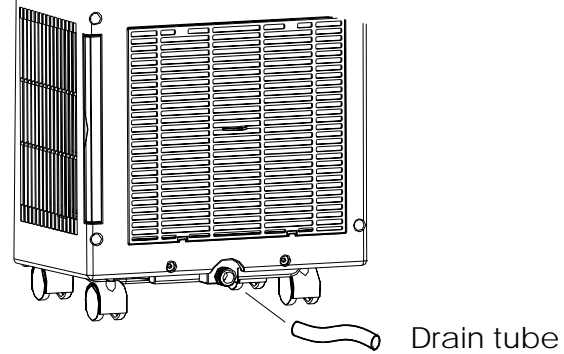


FIG.14

Please note:

1. The drain must be at or below the outlet level.
2. Flashing Comp / Water indicator will not function in this mode of drainage.
3. **This unit will not shut off when an external drain pan/tray is filled.**
4. If you want to extend the water tube, you can connect it with another tube (Diameter: 0.71").
5. When the room humidity is over 85%, we recommend continuous drainage.

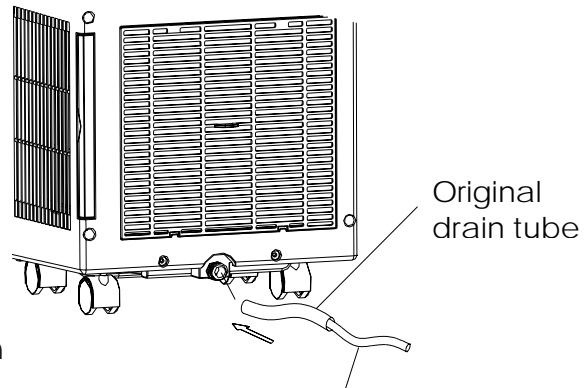


FIG.15

Extended drain tube
(Outer Diameter:
0.71")

Maintenance – Cleaning the Unit

Always unplug the air conditioner from the power outlet before cleaning. Clean the air conditioner regularly to maximize performance and efficiency.

Cleaning the unit

Use a soft damp cloth to wipe the body clean.

Use a soft bristle brush to clean between the control panel's buttons.

Never use abrasive chemicals, gasoline, detergents, chemically treated cloths, or other cleaning solvents that may damage the cabinet exterior.

Cleaning the pre-filters

Use a vacuum cleaner or tap the filter lightly to remove loose dust and dirt, then rinse thoroughly under warm running water that is no hotter than 104° F. Dry thoroughly before replacing.

Note: The activated carbon filter is not washable- replace it as needed. Contact EdgeStar at 1-866-319-5473 or via email at service@edgestar.com for replacement filters.

Warning: Never operate the unit without the filters.

Preparation for Storage

Follow the instructions below to prepare your product for storage.

1. Drain all the water from the unit before storing. Operate the unit in fan mode for a few hours to thoroughly dry the inside.
2. Clean or change the filter.
3. Unplug and store the power cord as shown.
4. Replace the unit in the original carton, or cover it before storing away.

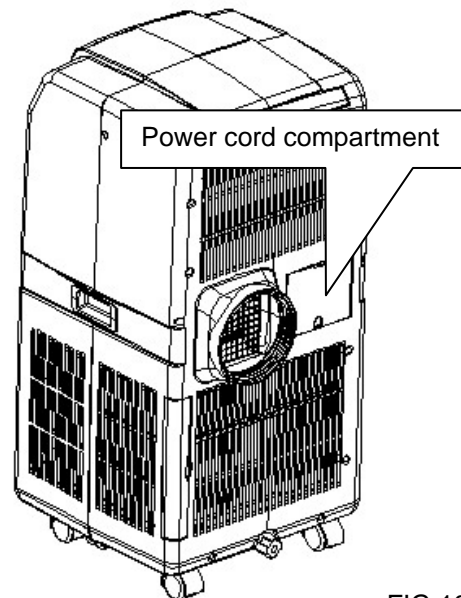


FIG.16

Optimizing Performance

For Maximum Performance and Efficiency:

1. Do not cover the exhaust air outlet (exhaust) while in use.
2. Do not place the unit in front of curtains or drapes- to ensure they do not obstruct the air inlet.
3. Minimize the length of the exhaust hose.
4. Make sure the exhaust hose is as straight as possible.
5. Keep curtains, blinds or drapes closed during the sunniest part of the day.
6. Use the timer to operate the unit before it is needed. For example, set the timer to turn on the unit in cool mode for 3 or more hours to cool the room before you arrive. You may want to operate the unit all day if you live in a warmer climate.
7. Minimize the heat sources (direct sunlight, computers, servers, people, etc.) in the room.
8. Close all windows and doors.
9. Use the unit in a contained room. For example, a room with four walls and a roof, instead of a partitioned studio, or warehouse.
10. Make sure the unit is on a level surface.
11. Minimize the amount of humidity in the room. For example, adding a dehumidifier.
12. To prolong the compressor's life, please wait at least 3 minutes before turning the unit back on after shutting it off.
13. Inspect and keep the pre-filters clean by cleaning regularly.
14. Inspect and replace the activated carbon filters regularly.
15. Perform routine maintenance.

Troubleshooting

My air conditioner is not functioning at all.

- The air conditioner may not be receiving electrical power. Make sure the unit is plugged in.
- Press the test/reset buttons on the LCDI power cord.
- Move the air conditioner to another outlet that is able to provide sufficient power. Check your circuit breaker. (Refer to the rating label on the back of the unit to determine the Amperage draw). Check to see if the Compressor/ Water indicators are flashing. Drain the unit and restart.
- If you are using the remote to power on the unit, check to see if the remote's batteries are installed correctly. If the LED indicator on the remote does not turn on when pressing the power button, replace the batteries.
- If no indicators turn on when you hit the power button, the control panel may be unplugged from the circuit board. Contact customer service.

My air conditioner is not cooling at all.

- Make sure that the unit is set on cool mode. Set temperature manually (see pg 10-11).
Note: the compressor may take up to 3 minutes to turn on.
- The unit should be in a room where the ambient temperature is below 95 degrees F. If the ambient temperature is above 95 degrees F, the unit will not blow cold air. Follow the steps below to increase the performance and efficiency of your unit's compressor:
 1. Minimize the heat sources in the room.
 2. Minimize the size of the area to be cooled. (Close doors and windows.)
 3. Close curtains or pull down blinds, and minimize the direct sunlight into the room.
 4. Remove additional heat sources such as computer equipment, servers, etc.
 5. Run the unit before it is needed. For example, run the unit in the morning before the area gets hot, and continue to run the unit all day long in order to maintain a low temperature.
 6. Use more than one unit to cool the area, or use a larger unit.
- Remove the exhaust hose and run the unit for 5 minutes. Compare the air temperature between the exhaust and the front. If the exhaust is warmer than the interior air, follow the steps above to decrease the ambient temperature of the room.
- The filter may be dusty or blocked. Clean the filter. Replace it if needed.
- Check to make sure the air inlet or exhaust ports are not partially obstructed.
- Check to see if the condenser coils located behind the air filters are dirty. Carefully vacuum the coils clean.

My air conditioner is making a loud noise.

- Make sure the unit is on a level surface.
- Make sure that a foreign object has not jammed the fan.
- Make sure that the floor underneath the machine is even.
- If the unit is level and making a continuous knocking noise, contact customer service.

The unit runs for a little while and then it trips the power cord or the circuit breaker.

Or the control panel lights blink randomly.

- Move the unit to another outlet or unplug the unit, wait for a couple of minutes, and plug it in.
- The air conditioner may be plugged into an outlet that can not supply the correct amount of current. Plug the unit in a different room and test. If this works, contact an electrician about the outlet that is not supplying enough current.
- The unit may have a faulty control panel. Contact customer service.

My air conditioner is leaking.

- Make sure that the rubber plug and drain cap are attached, and the unit is on a level surface.
- Check for cracks or damage to the bottom of the unit.

Specifications

Description of Product	EdgeStar Portable Air Conditioner
Model	AP420HS
Voltage / Frequency	115 V, 60 Hz
Power / Ampere Consumption	1230W / 9.2 A
Maximum Dehumidifying Capacity	55 pints/day
Refrigerant	R22/15.2OZ
Fan speeds	2 (High and Low)
Timer	1- 24 hours
Net Weight	64 lbs.
Dimensions	29 1/3" x 14 1/3" x 15 1/2" (HxWxD)

Notice: Electrical products should not be disposed with household waste. Please check with your local authorities to locate an appropriate recycling facility.

EdgeStar Limited Warranty

This EdgeStar product is warranted to be free from defective workmanship and materials for the first year following the date of original purchase. Replacement parts will be supplied free of charge for the first year following the date of original purchase. Labor will be performed free of charge for the first 90 days following the date of original purchase.

WHAT IS COVERED:

This warranty applies to the original purchaser only, and only covers defects in workmanship experienced during operation of the product under normal service, maintenance, and usage conditions. This warranty applies to the purchase and use of this product in residential settings within the United States of America.

WHAT IS NOT COVERED:

The following limitations apply to the coverage of this warranty:

Optional accessories, attachments, and appearance items are excluded from warranty coverage, as is shipping damage, and any damage caused by improper voltage or any other misuse, including abnormal service, handling, or usage.

This warranty does not cover normal wear and tear on parts or replacement of parts designed to be replaced, e.g. filters, etc.

This warranty does not cover service trips to deliver, pick-up, repair, or install the product, or to instruct in proper usage of the product.

Damages or operating problems resulting from misuse, abuse, operation outside environmental specifications, uses contrary to instructions provided in the owner's manual, accidents, vermin, fire, flood, improper installation, unauthorized service, unauthorized installation or modification, or commercial use are excluded from warranty coverage.

This warranty does not cover labor incurred 91 days or more after the date of original purchase.

This warranty does not cover use of EdgeStar products in commercial settings.

DESCRIPTION OF WARRANTY SERVICE:

All defective product components covered by this warranty will be repaired or replaced, at EdgeStar's option, free of charge on a mail-in basis to EdgeStar's authorized repair facility during the first 90 days from the date of original purchase. All defective product components covered by this warranty will be repaired or replaced, at EdgeStar's option, on a mail-in basis to EdgeStar's authorized repair facility during the time period beginning on the 91st day from the date of original purchase and ending one year from the date of original purchase. During this time period, parts will be supplied free of charge, but labor charges will apply. All replacement parts and units will be new, re-manufactured, or refurbished. All products and components replaced by EdgeStar under warranty service become the property of EdgeStar.

OBTAINING WARRANTY SERVICE:

Contact EdgeStar for troubleshooting assistance and warranty service authorization at 1-866-319-5473.

Please have your order receipt available to confirm the date of purchase.

Once an EdgeStar authorized representative has confirmed that your product is eligible for warranty service, the product must be returned to our EdgeStar repair facility.

The purchaser is solely responsible for prepaying all shipping related costs to and from the repair facility.

EdgeStar is not responsible for damage resulting from shipper mishandling or improper packaging. Do not return a defective product to the place of purchase.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. NEITHER THE MANUFACTURER NOR ITS DISTRIBUTORS SHALL BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.



For product guides, additional troubleshooting resources, and up to date information, visit us on the web at: <http://www.edgestar.com>

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Austin, TX 78708-1336

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