

Remote Control Manual



Portable Room Air Conditioner Remote Control for:

PS-121B
PSH-141A

Comfort-Aire®

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KEEP THIS INFORMATION AS A RECORD OF YOUR PURCHASE

PRODUCT IDENTIFICATION

Model Number

Serial Number

Date of Purchase

INSTALLATION

Installer Name

Phone Number/Contact Information

Date Installation Completed

Component of new HVAC system Replacement only

Remember to retain your bill of sale as proof of warranty period.

If you should ever have a warranty claim, you will need the model number, serial number and dated receipt as proof of purchase.

USING THE REMOTE CONTROLLER



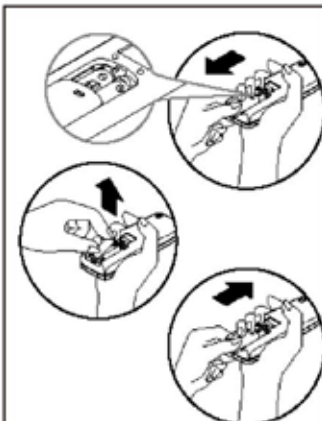
Location of the remote controller.

Use the remote controller within a distance of 25 feet (8 meters) from the unit, pointing it towards the receiver. Reception is confirmed by a beep.

CAUTION

- The unit will not operate if curtains, doors or other materials block the signals from the remote controller to the indoor unit. Prevent any liquid from spilling onto the remote controller. Do not expose the remote controller to direct sunlight or heat.
- If the infrared signal receiver on the unit is exposed to direct sunlight, the air conditioner may not function properly. Use curtains to prevent the sunlight from falling on the receiver.
- If other electrical appliances react to the remote controller, either move these appliances or consult your local dealer.

REPLACING THE BATTERIES



The remote controller is powered by two batteries (R03/ LR03X2) housed in a compartment on the back of the unit and protected by a cover.

- (1) Remove the cover by pressing and sliding off.
- (2) Remove the old batteries and insert the new batteries, placing the(+) and (-) ends correctly.
- (3) Reattach the cover by sliding it back into position.

NOTE: When the batteries are removed, the remote controller erases all programming. After new batteries are inserted, the remote controller must be reprogrammed.

CAUTIONS

- Do not mix old and new batteries or batteries of a different type.
- Do not leave the batteries in the remote controller if it is not going to be used for 2 or 3 months.
- Dispose of the old batteries in a responsible manner.

REMOTE CONTROLLER SPECIFICATIONS

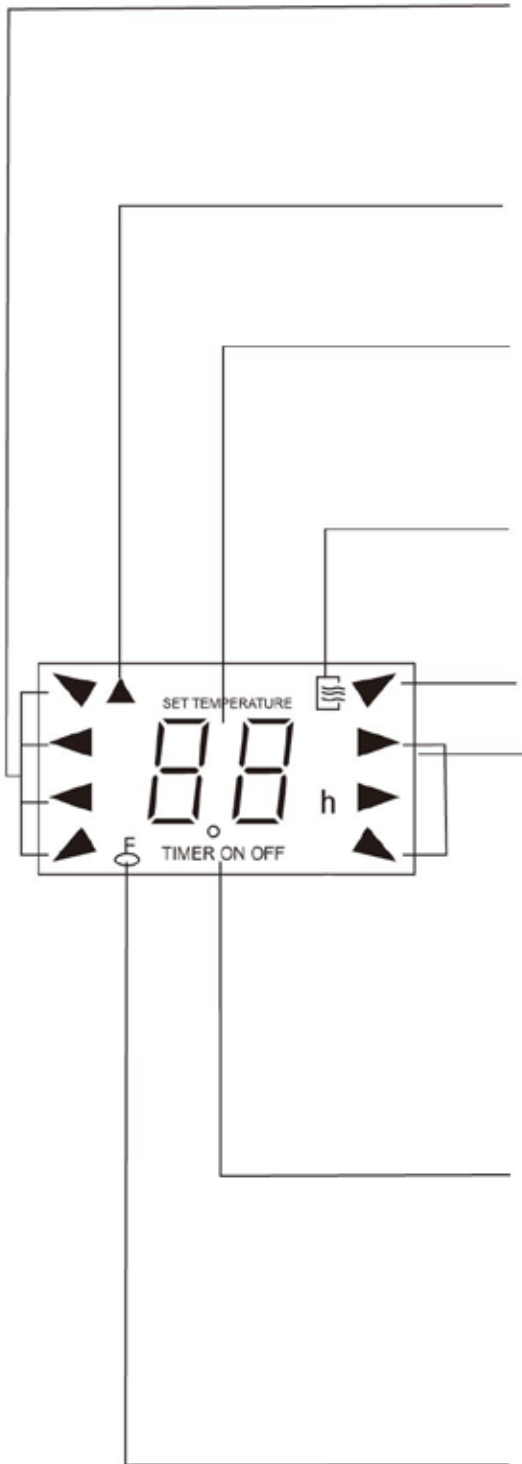
Rated Voltage	3.0V(Dry batteries R03/LR03×2)
Lowest Voltage of CPU Emitting Signal	2.0V
Signal Receiving Range	25 ft/8m
Environment	5°C~60°C(41°F~140°F)

PERFORMANCE FEATURE

1. Operating Mode: AUTO, COOL, DRY, HEAT (PSH-141 model only), and FAN.
2. Timer setting function in 24 hours.
3. Indoor setting temperature range : 62°F~88°F (17°C~30°C)
4. Full function of LCD (Liquid Crystal Display)

NOTE: All the illustrations in this manual are for explanation purpose only. Your unit may appear slightly different, but will function as described.

INDICATORS ON LCD



MODE display

Displays the current selected mode. Including AUTO, COOL, DRY, HEAT (PSH-141 model only) and FAN.

Transmission Indicator

This transmission indicator will light when the remote controller transmits signals to the indoor unit.

Temp./Timer display

The temperature setting (from 17°C (62°F) to 30°C (88°F) or timer setting (0~24h) will be displayed. If FAN mode is selected, there will be no display.

ON/OFF display

This indicator will be displayed when the unit is operating.

MODE display (FAN mode)

FAN SPEED display

Displays the selected fan speed: AUTO, HIGH, MED and LOW. Nothing displays when the fan speed is selected in AUTO speed. When AUTO or DRY mode is selected, no signals are displayed.

TIMER display

This display area shows the settings of the TIMER. If only the Auto-on time function is set, LCD will display TIMER ON. If only the Auto-off time function is set, it will display TIMER OFF. If both functions are set, it will display TIMER ON OFF which indicates you have chosen both the Auto-on time and Auto-off time.

LOCK Indicator

LOCK is displayed when pushing the LOCK button. Push the LOCK button to clear display.

HOW TO USE THE BUTTONS

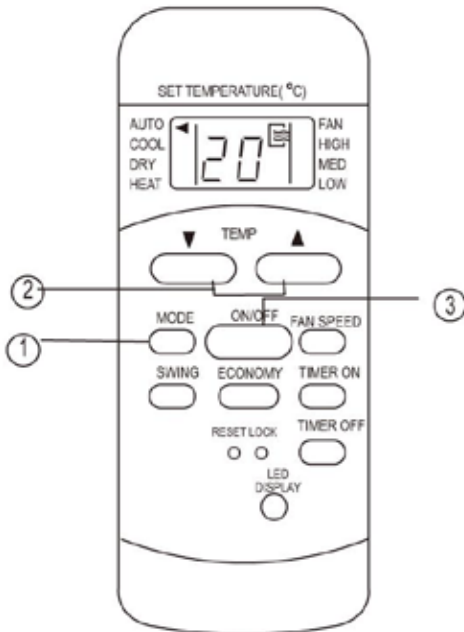
Auto Operation

Ensure the unit is plugged in and power is available. The OPERATION indicator on the display panel of the indoor unit illuminates.

1. Press the **MODE** button to select Auto.
2. Press the **TEMP** button to set the desired temperature. The temperature can be set within a range of 17°C(62°F)~ 30°C (86°F) in 1°C(2°F) increments.
3. Press the **ON/OFF** button to start the unit.

NOTE:

1. In the Auto mode, the unit can logically choose Cooling, Fan, and Dehumidifying modes by sensing the difference between the actual ambient room temperature and the set temperature on the remote controller.
2. In the Auto mode the fan speed is automatically controlled.
3. If the Auto mode does not heat or cool adequately for personal comfort, the desired mode can be selected manually.



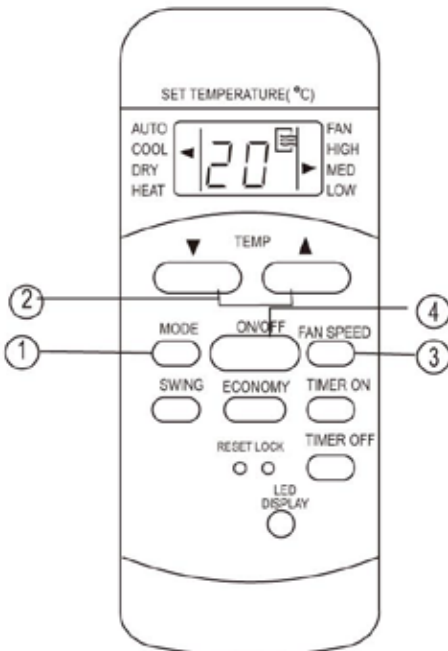
Cooling / Heating / Fan Operation

Ensure the unit is plugged in and power is available.

1. Press the **MODE** button to select COOL, HEAT, (PSH-141 model only) or FAN mode.
2. Press the **TEMP** button to set the desired temperature. The temperature can be set within a range of 17°C(62°F)~ 30°C (86°F) in 1°C(2°F) increments.
3. Press the **FAN SPEED** button to select the fan speed in four steps- Auto, Low, Med, or High.
4. Press the **ON/OFF** button to start the unit.

NOTE:

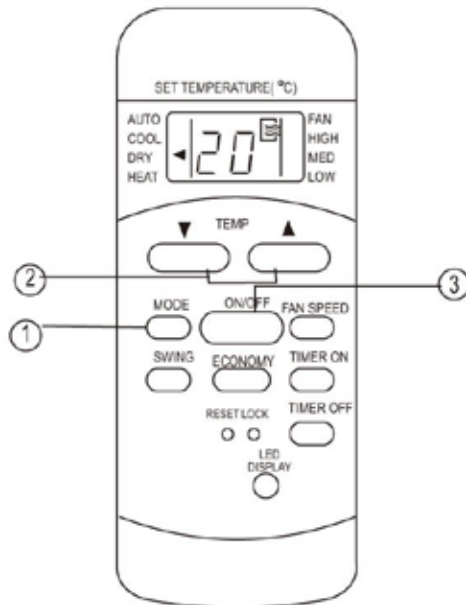
In the FAN mode, the setting temperature is not displayed in the remote controller and you cannot control the room temperature. In this case, only steps 1, 3 and 4 may be performed.



HOW TO USE THE BUTTONS

Dehumidifying Operation

Ensure the unit is plugged in and power is available.
The OPERATION indicator on the display panel of the indoor unit illuminates.

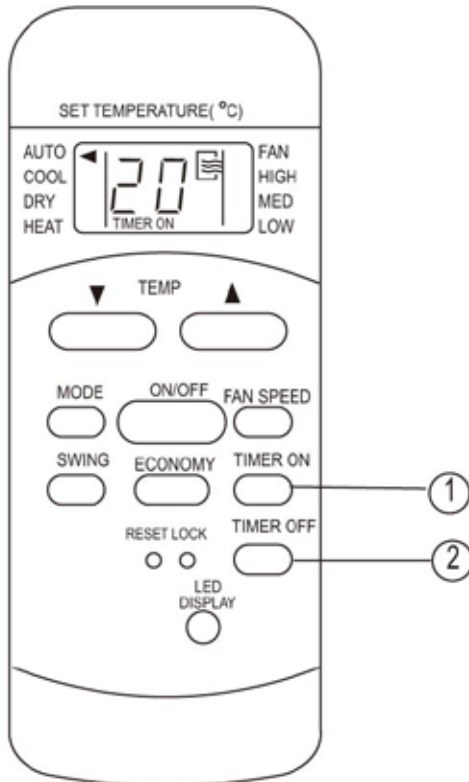


1. Press the **MODE** button to select DRY mode.
2. Press the **TEMP** button to set the desired temperature. The temperature can be set within a range of 17°C(62°F)~ 30°C (86°F) in 1°C(2°F) increments.
3. Press the **ON/OFF** button to start the unit.

NOTE:

In the Dehumidifying mode, you cannot change the fan speed. It is controlled automatically.

HOW TO USE THE BUTTONS



Timer Operation

Press the TIMER ON button to set the auto-on time of the unit. Press the TIMER OFF button to set the auto-off time of the unit.

1. Press the TIMER ON button. The remote controller shows TIMER ON, the last Auto-on setting time and the signal “h” will be shown on the LCD display area. The Auto-on time can now be reset to START the operation.
2. Push the TIMER ON button again to set desired Auto-on time. Each time you press the button, the time increases in 30 minutes increments, up to 10 hours, then at 1 hour increments up to 24 hours.
3. After setting the TIMER ON, there will be a half second delay before the remote controller transmits the signal to the unit. After approximately 2 seconds, the signal “h” will disappear and the set temperature will re-appear on the LCD display window.

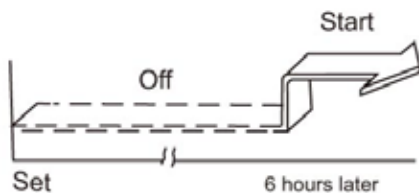
To set the Auto-Off Timer

1. Press the TIMER OFF button. The remote controller shows TIMER OFF. The last Auto-off setting time and the signal “h” will be shown on the LCD display area. The Auto-off time can now be reset to START the operation.
2. Push the TIMER OFF button again to set desired Auto-off time. Each time you press the button, the time increases in 30 minute increments, up to 10 hours, then at 1 hour increments up to 24 hours.
3. After setting the TIMER OFF, there will be a half second delay before the remote controller transmits the signal to the unit. After approximately another 2 seconds, the signal “h” will disappear and the set temperature will re-appear on the LCD display window.

HOW TO USE THE BUTTONS

IMPORTANT

The effective operation time set by the remote controller for the timer function is limited to the following settings: 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24.



Examples of Timer Setting

TIMER ON (Auto-on Operation)

The *TIMER ON* feature is useful when you want the unit to turn on automatically. For instance, you can set the unit to turn on before you will be returning home, and the unit will automatically start operating at the set time.

Example:

To start the unit in 6 hours:

1. Press the **TIMER ON** button, the last setting of starting operation time and the signal "h" will show on the display area.
2. Press the **TIMER ON** button to display "6:0h" on the **TIMER ON** display of the remote controller.
3. Wait for about 3 seconds and the digital display area will show the temperature again, indicating the function has been activated.

HOW TO USE THE BUTTONS



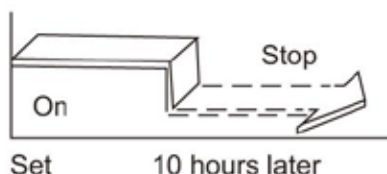
Timer OFF (Auto-off Operation)

The TIMER OFF feature is useful when you want the unit to turn off automatically after you go to bed or when you leave for work. The unit will stop automatically at the set time.

Example:

To stop the unit in 10 hours:

1. Press the TIMER OFF button, the last setting for stopping operation and the signal “h” will show on the display area.
2. Press the TIMER OFF button to display “10h” on the TIMER OFF display of the remote controller.
3. Wait for about 3 seconds and the digital display area will show the temperature again. This function is now activated.



Combined Timer

(Setting both ON and OFF timers simultaneously)

TIMER OFF → TIMER ON (On → Stop → Start operation)

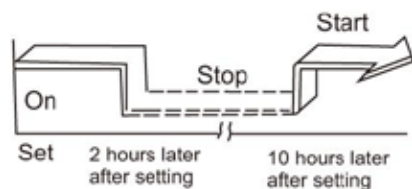
This feature is useful when you want to stop the unit after you go to bed, and start it again in the morning when you wake up or when you return home.



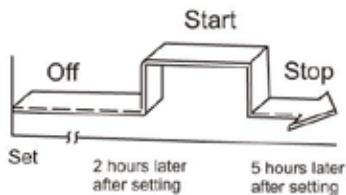
Example:

To stop the air conditioner in 2 hours and start it again 10 hours later:

1. Press the TIMER OFF button.
2. Press the TIMER OFF button again to display 2.0h on the TIMER OFF display.
3. Press the TIMER ON button.
4. Press the TIMER ON button again to display 10h on the TIMER ON display .
5. Wait for the remote control to display the set temperature.



HOW TO USE THE BUTTONS



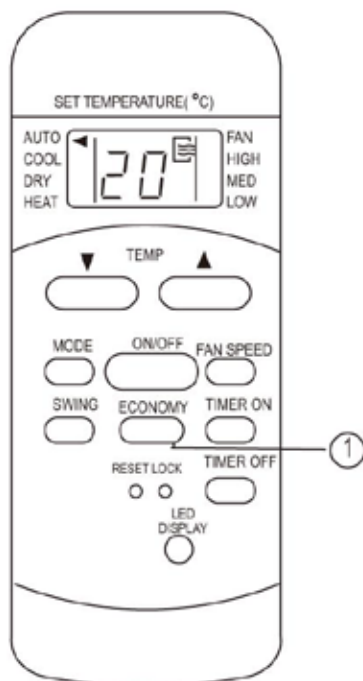
TIMER ON → TIMER OFF (Off → Start → Stop operation)

This feature is useful when you want to start the unit before you wake up and stop it after you leave the house.

Example:

To start the unit in 2 hours, and stop it 5 hours later.

1. Press the TIMER ON button.
2. Press the TIMER ON button again to display on the TIMER ON display.
3. Press the TIMER OFF button.
4. Press the TIMER OFF button again to display 5.0 on the TIMER OFF display.
5. Wait for the remote control to display the setting temperature.



CAUTION

The timer setting (TIMER ON or TIMER OFF) that occurs immediately after the set time, is the setting that will be activated first.

Economy (SLEEP) Operation

Activate/Disable sleep function can maintain the most comfortable temperature and save energy. This function is available on COOL, HEAT or AUTO mode only. For details on the LCD display window, see "Sleep operation" in "USER'S MANUAL".

NOTE:

While the unit is running under SLEEP mode, it will be cancelled if MODE, FAN SPEED or ON/OFF is pressed.

NOTES

Button design is based on typical model and might be slightly different from the actual one you purchased, the actual shape shall prevail.

If there are significant differences between functions/illustrations presented in this remote controller manual and the unit's User Manual, the User's Manual should be considered as the correct version.

References to "Heat Mode" apply only to the PSH-141 model. If the unit does not have the heating function, it will not operate in that mode when the corresponding button on the remote controller is pressed.

This device complies with all national regulations. In Canada, it complies with CANICES-3(B)/NMB-3(B). In USA, this device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If the unit does cause interference to radio or television reception (determined by turning the portable unit off and on to see if the interference continues), the user should to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one to which the radio or TV is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING!

Changes or modifications not specifically approved by the manufacturer could void the warranty, and could result in damage to the unit, as well as to the structure; such modifications could also result in physical injury.

LIMITED EXPRESS WARRANTY

Congratulations on purchasing your new HVAC equipment. It's been designed for long life and reliable service, and is backed by one of the strongest warranties in the industry. Your unit automatically qualifies for the warranty coverage listed below, providing you keep your proof of purchase (receipt) for the equipment.

GENERAL WARRANTY INFORMATION

This limited express warranty is applicable to HRC Series water source heat pumps manufactured by Heat Controller/MARS and used in commercial installations.

LIMITED ONE (1) YEAR EXPRESS WARRANTY ON PARTS

Heat Controller/MARS warrants all parts of the HRC water source heat pump used in commercial applications to be free from defects in workmanship and materials for normal use and maintenance for one (1) year from the date of purchase by the original consumer for the original installation. This Express Limited Warranty applies only when the system is installed per Heat Controller/MARS, installation instructions and in accordance with all local, state and national codes for normal use.

LIMITED FIVE (5) YEAR EXPRESS WARRANTY ON COMPRESSOR

We will replace a compressor which proves to be defective for a period of five (5) years from date of heat pump purchase. All restrictions, limitations and procedures for the one year parts warranty apply to the additional compressor warranty period.

EXCEPTIONS

The Limited Express Warranty does not cover normal maintenance—Heat Controller/MARS recommends that regular inspection/maintenance be performed at least once a season and proof of maintenance be kept. Additionally, labor charges, transportation charges for replacement parts, replacement of refrigerant or filters, any other service calls/repairs are not covered by this Limited Warranty. It also does not cover any portion or component of the system that is not supplied by Heat Controller/MARS, regardless of the cause of failure of such portion or component.

CONDITIONS FOR WARRANTY COVERAGE

- Unit must be operated according to Heat Controller/MARS operating instructions included with the unit and cannot have been subjected to accident, alteration, improper repair, neglect or misuse, or an act of God (such as a flood)
- Serial numbers and/or rating plate have not been altered or removed
- Installation was done by a trained, licensed or otherwise qualified geothermal dealer/contractor
- Performance cannot be impaired by use of any product not authorized by Heat Controller/MARS, or by any adjustments or adaptations to components
- Damage has not been a result of inadequate wiring or voltage conditions, use during brown-out conditions, or circuit interruptions
- Air flow around any section of the unit has not been restricted
- Unit remains in the original installation
- Unit was not purchased over the internet

DURATION OF WARRANTY & REGISTRATION

Owner responsibilities are set forth in the instruction manual—read it carefully.

The warranty begins on the date of purchase by the original consumer. The consumer must retain a receipted bill of sale as proof of warranty period. Without this proof, the express warranty begins on the date of shipment from the factory.

REMEDY PROVIDED BY THE LIMITED EXPRESS WARRANTY

The sole remedy under the Limited Warranty is replacement of the defective part. If replacement parts are required within the period of this warranty, Heat Controller/MARS replacement parts shall be used; any warranty on the replacement part(s) shall not affect the applicable original unit warranty. Ready access to the unit for service is the owner's responsibility. Labor to diagnose and replace the defective part is not covered by this Limited Express Warranty. If for any reason the replacement part/product is no longer available during the warranty period, Heat Controller/MARS shall have the right to allow a credit in the amount of the current suggested retail price of the part/product instead of providing repair or replacement.

LIMITATION OF LIABILITY

1. There are no other express or implied warranties. Heat Controller/MARS makes no warranty of merchantability. We do not warrant that the unit is suitable for any particular purpose or can be used in buildings or rooms of any particular size or condition except as specifically provided in this document. There are no other warranties, express or implied, which extend beyond the description in this document.
2. All warranties implied by law are limited in duration to the one-term of the parts warranty. Your exclusive remedy is limited to the replacement of defective parts. **We will not be liable for any consequential or incidental damages caused by any defect in this unit.**
3. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow limitation on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.
4. No warranties are made for units sold outside the continental United States and Canada. Your distributor or final seller may provide a warranty on units sold outside these areas.
5. Heat Controller/MARS will not be liable for damages if our performance regarding warranty resolution is delayed by events beyond our control including accident, alteration, abuse, war, government restrictions, strikes, fire, flood, or other acts of God.

HOW TO OBTAIN WARRANTY SERVICE OR PARTS

If you have a warranty claim, notify your installer promptly. If he doesn't take care of your claim, write to Heat Controller/MARS, P.O. Box 1089, Jackson MI 49204. Enclose a report of inspection by your installer or service person. Include model number, serial number, and date of purchase.

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Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations.

Incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.



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