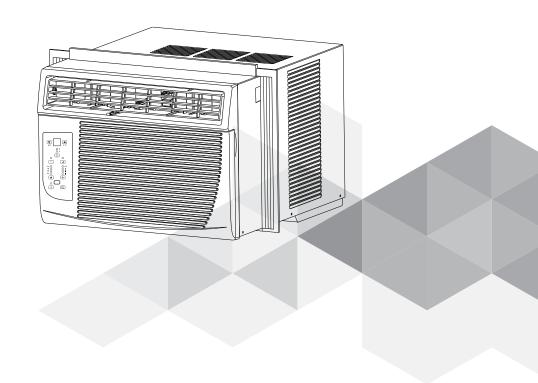


## WINDOW AIR CONDITIONER

model nos. 043-5238-4, 043-5240-6



Toll-free: 1-866-827-4985

IMPORTANT: Before using your air conditioner, please read this manual carefully and keep it for future reference.

Instruction Manual

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## A READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventive care on your part can save you a great deal of time and money over the life of your air conditioner. You'll find many answers to common problems in the chart of troubleshooting tips. If you review our chart of Troubleshooting Tips first, you may not need to call for service at all.

To prevent injury to the user or other people, or property damage, the following instructions must be followed. Incorrect operation due to ignoring instructions may cause harm or damage. The seriousness is classified by the following indications.

	0	Never do this.	0	Always do this.	
4	CAUTION	This symbol indicates the possibility of injury or damage to property.			
4	WARNING	This symbol indicates the possibility of death or serious injury.			

<b>⚠</b> WARNING		
Plug in power plug properly.		
<ul> <li>Otherwise, it may cause electric shock or fire due to excess heat generation.</li> </ul>	It may cause electric shock or fire due to heat generation.	It may cause electric shock or fire.     If the power cord is damaged, it must be replaced by the manufacturer or an authorised service centre or a similarly-qualified person in order to avoid a hazard.
<ul><li>Always install circuit breaker and a dedicated power circuit.</li></ul>	⊗Do not operate with wet hands or in damp environment.	⊗ Do not direct airflow at room occupants only.
<ul> <li>Incorrect installation may cause fire and electric shock.</li> </ul>	• It may cause electric shock.	This could damage your health.
① Always ensure effective grounding.	ODo not allow water to run into electric parts.	S Do not modify power cord length or share the outlet with other appliances.
<ul> <li>Incorrect grounding may cause electric shock.</li> </ul>	<ul> <li>It may cause failure of machine or electric shock.</li> </ul>	• It may cause electric shock or fire due to heat generation.
① Unplug the unit if strange sounds, smell, or smoke comes from it.	⊗Do not use the socket if it is loose or damaged.	⊙ Do not open the unit during operation.
<ul> <li>It may cause fire and electric shock.</li> </ul>	<ul> <li>It may cause fire and electric shock.</li> </ul>	It may cause electric shock.
⊕ Keep firearms away.	⊗Do not use the power cord close to heating appliances.	O Do not use the power cord near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.
It may cause fire.	<ul> <li>It may cause fire and electric shock.</li> </ul>	It may cause an explosion or fire.
① Ventilate room before opera a gas leakage from another	ating air conditioner if there is appliance.	© Do not disassemble or modify unit.
• It may cause explosion, fire and,	burns.	It may cause failure and electric shock.

## **A** CAUTION

- When the air filter is to be removed, do not touch the metal parts of the unit.
- It may cause an injury.
- Do not use strong detergent such as wax or thinner, but use a soft cloth.
- Appearance may be deteriorated due to change of product colour or scratching of its surface.
- Stop operation and close the window in storm or hurricane.
- Operation with windows opened may cause wetting of indoor and soaking of household furniture.
- Always insert the filters securely.
   Clean filter once every two weeks
- Operation without filters may cause failure.
- O Do not place obstacles around air-inlets or inside of air-outlet.
- It may cause failure of appliance or accident.
- Use caution when unpacking and installing.
- Sharp edges could cause injury.

- O Do not put a pet or house plant where it will be exposed to direct airflow.
- This could injure the pet or plant.
- O Do not clean the air conditioner with water.
- Water may enter the unit and degrade the insulation. It may cause an electric shock.
- When the unit is to be cleaned, switch off, and turn off the circuit breaker.
- Do not clean unit when power is on as it may cause fire and electric shock. It may cause an injury.
- Hold the plug by the head of the power plug when taking it out.
- It may cause electric shock and damage.
- O Do not place heavy objects on the power cord and ensure that the cord is not compressed.
- There is danger of fire or electric shock

- Ventilate the room well when used together with a stove, etc
- An oxygen shortage may occur.
  - Do not use for special purposes.
- Do not use this air conditioner to preserve precision devices, food, pets, plants, and art objects. It may cause deterioration of quality, etc.
- ① Ensure that the installation bracket of the outdoor appliance is not damaged due to prolonged exposure.
- If bracket is damaged, there is concern of damage due to falling of unit.
- Turn off the main power switch when not using the unit for a long time
- It may cause failure of product or fire.
- O Do not drink water drained from air conditioner
- It contains contaminants and could make you sick.
- ① If water enters the unit, turn the unit off at the powe outlet and switch off the circuit breaker. Isolate supply by taking the power-plug out and contact a qualified service technician.

## **A** CAUTION

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarlyqualified persons in order to avoid a hazard.
- Prior to first use or after moving, the product must remain in its upright position for at least 24 hours prior to being turned on.

- The appliance shall be installed in accordance with national wiring regulations.
- Do not operate your air conditioner in a wet room such as a bathroom or laundry room.
- The appliance with electric heater shall have at least 3' (1 m) space to any combustible materials.
- Contact the authorised service technician for repair or maintenance of this unit.
- Contact the authorised installer for installation of this unit.



The power supply cord with this air conditioner contains a current detection device designed to reduce the risk of fire. Please refer to the section Operation of Current Device for details. In the event that the power supply cord is damaged, it cannot be repaired, it must be replaced with a cord from the product manufacturer.



#### WARNING

Avoid fire hazard or electric shock. Do not use an extension cord or an adaptor plug. Do not remove any prong from the power

#### Grounding type wall receptacle



Power supply cord with 3-prong grounding plug and current detection device.

## WARNING

For Your Safety

Do not store or use gasoline or other flammable vapours or liquids in the vicinity of this or any other appliance.



#### 

#### **Prevent Accidents**

To reduce the risk of fire, electric shock, or injury to persons when using your air conditioner, follow basic precautions, including the following:

- · Be sure the electrical service is adequate for the model you have chosen. This information can be found on the serial plate, which is located on the side of the the cabinet and behind the grille.
- If the air conditioner is to be installed in a window, you will probably want to clean both sides of the glass first. If the window is a triple-track type with a screen panel included, remove the screen completely before installation.
- Be sure the air conditioner has been securely and correctly installed according to the installation instructions in this manual. Save this manual for possible future use in removing or installing this unit.
- When handling the air conditioner, be careful to avoid cuts from sharp metal fins on front and rear coils.



#### WARNING

#### **Electrical Information**

The complete electical rating of your new room air conditioner is stated on the serial plate. Refer to the rating when checking the electrical requirements.

- · Be sure the air conditioner is properly grounded. To minimize shock and fire hazards, proper grounding is important. The power cord is equipped with a three-prong grounding plug for protection against shock hazards.
- Your air conditioner must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle. Ensure the receptacle is accessible after the unit installation.
- Do not run air conditioner without side protective cover in place. This could result in mechanical damage within the air conditioner.
- Do not use an extension cord or an adaptor plug.

### **Operation of Current Device**

#### (Applicable to units that have current detection device only)

The power supply cord contains a current device that senses damage to the power cord. To test your power supply cord do the following:

- 1. Plug in the air conditioner.
- 2. The power supply cord will have TWO buttons on the plug head. Press the TEST button, you will notice a click as the RESET button pops out.
- 3. Press the RESET button, again you will notice a click as the button engages.
- 4. The power supply cord is now supplying electricity to the unit. (On some products this it also indicated by a light on the plug head.)

## NOTE:

- · Do not use this device to turn the unit on or off.
- · Always make sure the RESET button is pushed in for correct operation
- · The power supply must be replaced if it fails reset when either the TEST button is pushed, or it cannot be reset. A new one can be obtained from the product manufacturer.
- · If power supply cord is damaged, it cannot be repaired. It MUST be replaced by one obtained from the product manufacturer.

NOTE: This air conditioner is designed to be operated under condition as follows:

didei condition as follows.			
Cooling	Outdoor temp:	18 to 43°C (64 to 109°F)	
operation	Indoor temp:	17 to 32°C (62 to 90°F)	
Heating	Outdoor temp:	-5 to 24°C (23 to 76°F)	
operation	Indoor temp:	0 to 27°C (32 to 80°F)	

Note: Performance may be reduced outside of these operating temperatures.

WARNING: (for using R290/R32 refrigerant only)

-Do not use means to accelerate the defrosting process or to clean, other than those

recommended by the manufacturer.

-The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance) and ignition sources (for example: an operating electric heater) close to the appliance.

-Do not pierce or burn.

-Be aware that the refrigerants may not contain an odour.

-Compliance with national gas regulations shall be observed.

-Keep ventilation openings clear of obstructions.

-The appliance shall be stored so as to prevent mechanical damage from occurring.

-The appliance shall be stored in a well-ventilated area where the room

size corresponds to the room area specified for operation.

-Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.

-Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants. -DO NOT modify the length of the power cord or use an extension cord to power the unit. DO NOT share a single outlet with other electrical appliances. Improper power supply

can cause fire or electrical shock.

-Please follow the instructions carefully when handling, installing, clearing, or servicing the ai conditioner to avoid any damage or hazard. Flammable Refrigerant R32 is used within air conditioner. When maintaining or disposing the air conditioner, the refrigerant (R32 or R290) shall be recovered properly, and shall not discharge to air directly.

-No open fire or switch which may generate spark/arcing shall be

around air conditioner to avoid causing ignition of the flammable refrigerant used. Please follow the instructions carefully when storing or maintaining the air conditioner to prevent mechanical damage from occurring.
-Flammable refrigerant -R32 is used in air conditioner. Please follow the instructions

carefully to avoid any hazard.

Caution: Risk of fire/ flammable materials (Required for R32/R290 units only)



IMPORTANT NOTE: Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.



Explanation of symbols displayed on the unit (for the units with R32/R290 refrigerant only):

	WARNING	This symbol shows that this appliance uses a flammable refrigerant. If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire.
	CAUTION	This symbol shows that the operation manual should be read carefully.
	CAUTION	This symbol shows that service personnel should be handling this equipment and referring to the installation manual.
(li	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.

## $\Delta$ WARNINGS (for using R290/R32 refrigerant only)

- 1. Transport of equipment containing flammable refrigerants See transport regulations.
- 2. Marking of equipment using signs

See local regulations.

3. Disposal of equipment using flammable refrigerants

See national regulations.

4. Storage of equipment/appliances

The storage of equipment should be in accordance with the manufacturer's instructions.

5. Storage of packed (unsold) equipment

Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

#### 6. Information on servicing

1) Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2) Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

3) General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

4) Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e., non-sparking, adequately sealed or intrinsically safe.

5) Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available and on hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

6) No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any

pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. No Smoking signs shall be displayed.

7) Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

8) Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

The charge size is in accordance with the room size within which the refrigerant containing parts are installed;

The ventilation machinery and outlets are operating adequately and are not obstructed; If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;

Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected; and

Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

9) Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

That there no live electrical components and wiring are exposed while charging, recovering or purging the system; and

That there is continuity of earth grounding.

#### 7. Repairs to sealed components

- 1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have electricity supplied to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- 2) Particular attention shall be paid to the following to ensure that by working on electrical components:

Ensure the casing is not altered in such a way that the level of protection is affected.



This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc;

Ensure that apparatus is mounted securely; and

Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

#### 8. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

#### 9. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

#### 10. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

#### 11. Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants. Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

#### 12. Removal and evacuation

When breaking into the refrigerant circuit to make repairs or for any other purpose, conventional procedures shall be used. However, it is important that best practices are followed since flammability is a consideration. The following procedure shall be adhered to:

Remove refrigerant;

Purge the circuit with inert gas;

Evacuate:

Purge again with inert gas; then

Open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be flushed with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.

Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

#### 13. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed: Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them;

Cylinders shall be kept upright;

Ensure that the refrigeration system is earthed prior to charging the system with refrigerant; Label the system when charging is complete (if not already);

Extreme care shall be taken not to overfill the refrigeration system; and

Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

#### 14. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure ensure that:

Mechanical handling equipment is available, if required, for handling refrigerant cylinders;

All personal protective equipment is available and being used correctly:

The recovery process is supervised at all times by a competent person; and

Recovery equipment and cylinder s conform to the appropriate standards.

- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure the cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with manufacturer's instructions.
- h) Do not overfill cylinders. (No more than 80 % volume liquid charge.)
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.



k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

#### 15. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

### 16. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e., special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.



Read these instructions completely and carefully.

IMPORTANT — Save these instructions for local inspector's use.

IMPORTANT — Observe all governing codes and ordinances.

Note to installer — Be sure to leave these instructions with the consumer.

Note to consumer — Keep these instructions for future reference.

Skill level — Installation of this appliance requires basic mechanical skills.

Completion time — Approximately 1 hour. We recommend that two people install this product.

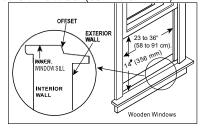
Proper installation is the responsibility of the installer.

Product failure due to improper installation is not covered under the warranty.
You MUST use all supplied parts and use

proper installation procedures as described in these instructions when installing this air conditioner.

## WINDOW REQUIREMENTS

Your air conditioner is designed to install in standard double hung windows with opening widths of 23 to 36" (58.4 to 91.4 cm).



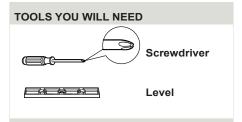
## A CAUTION

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

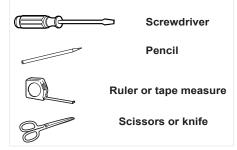
Do not change the plug on the power cord of the air conditioner.

Aluminum house wiring may present special problems— consult a qualified electrician.

When handling unit, be careful to avoid cuts from sharp metal edges and aluminum fins on front and rear coils.



#### **TOOLS YOU MAY USE**

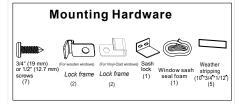




Save carton and these installation instructions for future reference. The carton is the best way to store unit during winter, or when not in use.

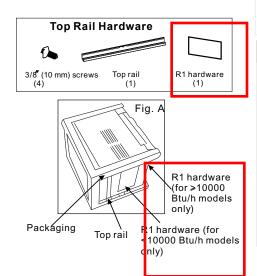
## 1 PREPARE THE WINDOW

Lower sash must open sufficiently to allow a clear vertical opening (H). See Table 1 for correct size. Side louvers and the rear of the AC must have clear air space to allow enough airflow through the condenser for heat removal. The rear of the unit must be outdoors not inside a building or garage.

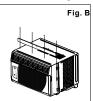


## 2 PREPARE AIR CONDITIONER

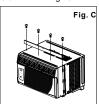
- A: Remove the air conditioner from the carton and place on a flat surface.
- B: Remove top rail and RT hardware (RT hardware only for ENERGY STAR models) from the packaging material as shown in Fig. A.



C: Align the hole in the top rail with those in the top of the unit as shown in Fig. B



D: Secure the top rail to the unit with the 3/8" (10 mm) screws as shown in Fig. C.



NOTE: For safety reasons, all four (4) screws MUST be securely fastened.

NOTE: The top rail hardware and the Fig. A, Fig. B and Fig. C are not applicable to the units more than 10000 Btu/h. Before installing unit, the top rail must be assembled on the unit (for <10000 Btu/h models only).

## 3 INSTALL THE ACCORDION PANELS

NOTE: Top rail and sliding panels at each side are offset to provide the proper pitch to the rear of 5/16" (8 mm). This is necessary for proper condensed water utilization and drainage. If you are not using the side panels for any reason, this pitch to the rear must be maintained.



A. Place unit on floor, a bench or a table. Hold the accordion panel in one hand and gently pull back the centre to free the open end. See Fig. 1.

Fig. 1

B. Slide the free end "I" section of the panel directly into the cabinet as shown in Fig. 2. Slide the panel down. Be sure to leave enough space to slip the top and bottom of the frame into the rails on the cabinet.

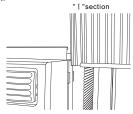


Fig.2

C. Once the panel has been installed on the side of the cabinet, make sure it sits securely inside the frame channel by making slight adjustments. Slide the top and bottom ends of the frame into the top and bottom rails of the cabinet. Fig. 3.

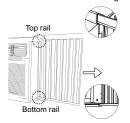
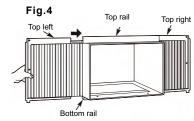


Fig.3

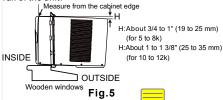
D. Slide the panel all the way in and repeat on the other side.



NOTE: If storm window blocks AC, see Fig. 11.

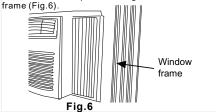
## 4 SECURE THE ACCORDION PANELS

A. Keep a firm grip on the air conditioner, carefully place the unit into the window opening so the bottom of the air conditioner frame is against the window sill (Fig.5). Carefully close the window behind the top rail of the unit.



NOTE: Check that air conditioned in strited back about H (Fig.5) (tilted about 3 to 4° downward to the outside). After proper installation, condensate should not drain from the overflow drain hole during normal use. Correct the slope otherwise.

B. Extend the side panels out against the window frame (Fig. 6)



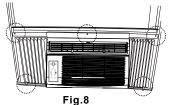
#### 5 INSTALL SUPPORT BRACKET

A. Place the frame lock between the frame extensions and the window sill as shown (Fig. 7). Drive 3/4 or 1/2" (19 or 12.7 mm) locking screws through the frame lock and into the sill.

**NOTE**: To prevent window sill from splitting, drill 1/8" (3 mm) pilot holes before driving screws.



B. Drive 3/4 or 1/2" (19 or 12.7 mm) locking screws through frame holes into window sash (Fig.8).

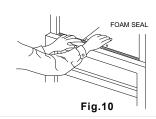


C. To secure lower sash in place, attach right angle sash lock with 3/4 or 1/2" (19 or 12.7 mm) screw as shown (Fig.9).



Fig.9

D. Cut window sash seal foam and insert it in the space between the upper and lower sashes (Fig.10).

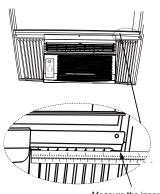


## 6 INSTALL R1 HARDWARE (only applicable to ENERGY STAR models)

In order to minimize air leaks and ensure optimal insulation, it is necessary to install the included R1 hardware to the side curtain. Follow the instructions below

Step 1. After the unit is installed to the window, measure the inner width of the side curtain as shown (Fig. 11).

Step 2. Mark a line on the provided R1 insulation panel at to a length 1/8" (3 mm) less than the measured width in step 1, then cut the R1 insulation panel along the line.



Measure the inner width of the side curtain

Fig.11

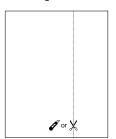


Fig.12

Step 3. Slide the cut R1 insulation panel into the side curtain (Fig.13).

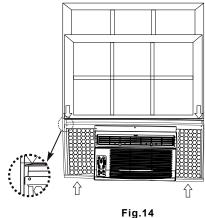


Fig.13

Step 4. Repeat on the other side.

### **INSTALL WEATHER STRIPPING (only** applicable to ENERGY STAR models)

In order to minimize air leaks between the room air conditoner and the window opening, trim the weather stripping to a proper length, peel off the protective backing and plug any gaps if needed (Fig. 14).



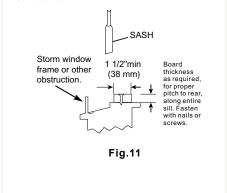
#### If AC is Blocked by Storm Window

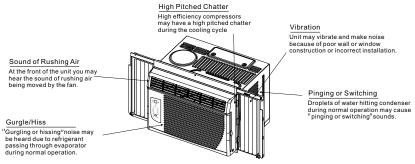
Add wood as shown in Fig.11, or remove storm window before air conditioner is installed.

If storm window frame must remain, be sure the drain holes or slots are not caulked or painted shut. Accumulated rain water or condensation must be allowed to drain out.

#### **Removing AC From Window**

- · Turn AC off, and disconnect power cord.
- · Remove sash seal from between windows, and unscrew safety sash lock.
- · Remove screws installed through frame and frame-
- · Close (slide) side panels into frame.
- · Keeping a firm grip on air conditioner, raise sash and carefully remove.
- · Be carefully not to spill any remaining water while lifting unit from window. Store parts WITH air conditioner.



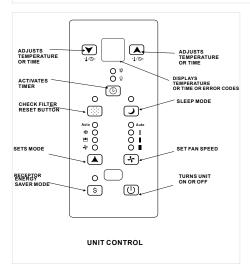




All the illustrations in this manual are for explanation purposes only. Your air conditioner may be slightly different. The actual shape shall prevail.

#### **ELECTRONIC CONTROL OPERATING INSTRUCTIONS**

Before you begin, thoroughly familiarize yourself with the control panel as shown below and all its functions, then follow the symbol for the functions you desire. The unit can be controlled by the unit controls alone or with the remote.



#### TO TURN UNIT ON OR OFF:

Press (1) ON/OFF button to turn unit on or off.

NOTE: The unit will initiate automatically the Energy Saver function in Cool, Dry, Auto (only Auto-cooling and Auto-fan) modes.

#### TO CHANGE TEMPERATURE SETTING:

## Press ▼ / ▲ UP/DOWN button to change temperature setting.

NOTE: Press or hold either UP(♠) or DOWN (▼) button until the desired temperature is seen on the display. This temperature will be automatically maintained anywhere between 17 °C(62°F) and 30 °C(86°F). If you want the display to read the actual room temperature, see "To Operate on Fan Only" section.

#### TO ADJUST FAN SPEEDS:

Press 4 to select the fan speed in four steps: Auto, Low, Med or High. Each time the button is pressed, the fan speed mode is shifted. On Dry mode, the fan speed is controlled at Low automatically.

#### **SLEEP FEATURE:**

Press Sleep button to initiate the sleep mode. In this mode the selected temperature will increase by 2°F/1(or 2)°C 30 minutes after the mode is selected. The temperature will then increase by another 2°F/1(or 2)°C after an additional 30 minutes. This new temperature will be maintained for 6 hours before it returns to the originally-selected temperature. This ends the Sleep mode, and the unit will continue to operate as originally programmed. The Sleep mode program can be cancelled at any time during operation by pressing the Sleep button again.

#### **CHECK FILTER FEATURE:**

Press ® Check Filter button to initiate this feature. This feature is a reminder to clean the air filter for more efficient operation. The LED (light) will illuminate after 250 hours of operation. To reset after cleaning the filter, press the Check Filter button and the light will go off.

#### **ENERGY SAVER FEATURE:**

Press Energy Saver button to initiate this function. This function is available on COOL, DRY, AUTO (only AUTO-COOLING and AUTO-FAN) modes. The fan will continue to run for 3 minutes after the compressor shuts off. The fan then cycles on for 2 minutes at 10 minute intervals until the room temperature is above the set temperature, at which time the compressor turns back on and cooling starts.

#### TO SELECT THE OPERATING MODE:

To choose operating mode, press  $\Delta$  Mode button. Each time you press the button, a mode is selected in a sequence that goes from Auto, Cool, Dry and Fan. The indicator light beside will be illuminated and remained on once the mode is selected.

The unit will initiate automatically the Energy Saver function under Cool, Dry, Auto (only Auto-Cooling and Auto-Fan) modes.

#### To operate on Auto feature:

- When you set the air conditioner in AUTO mode, it will automatically select cooling, heating (not available on coolingonly models), or fan-only operation depending on what temperature you have selected and the room temperature.
- The air conditioner will control the room temperature automatically at the temperature point you have selected.
- In this mode, the fan speed cannot be adjusted: it starts automatically at a predetermined speed that depends on the room temperature.

#### To operate on Fan Only:

- Use this function only when cooling is not desired, such as for room air circulation or to exhaust stale air (on some models). Remember to open the vent during this function, but keep it closed during cooling for maximum cooling efficiency. You can choose any fan speed you prefer.
- When using this function, the display will show the actual room temperature, not the set temperature as in the cooling mode.
- In Fan-only mode the temperature is not adjusted.

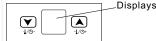
#### To operate on Dry mode:

 In this mode, the air conditioner will generally operate in the form of a dehumidifier. Since the conditioned space is a closed or sealed area, some degree of cooling will continue.

#### TIMER - AUTO START/STOP FEATURE:

- When the unit is on or off, first press Timer button: the TIMER ON indicator light illuminates. It indicates the Auto Start program is initiated.
- When the time of TIMER ON is displayed, press the Timer button again, the TIMER OFF indicator light illuminates.
   It indicates the Auto Stop program is initiated.
- Press or hold the UP or DOWN button to change the Auto time by 0.5 hour increments, up to 10 hours, then at 1 hour increments up to 24 hours. The control will count down the time remaining until start.
- The selected time will register in 5 seconds, and the system will automatically revert back to display the previous temperature setting or room temperature when the unit is on. When the unit is off there is no display.
- Turning the unit ON or OFF at any time or adjusting the timer setting to 0.0 will cancel the Auto Start/Stop timer program.

#### **DISPLAYS:**



#### **DISPLAYS:**

Shows the set temperature in "  $^{\circ}$ C" or "  $^{\circ}$ F" and the Auto-timer settings. While in Fan-only mode, it shows the room temperature.

#### Error codes:

- AS-Room temperature sensor error. Unplug the unit and plug it back in. If error repeats, call for service. NOTE: In Fan-only mode, it will display" LO" or "HI"
- -Evaporator temperature sensor error. Unplug the unit and plug it back in. If error repeats, call for service.
- NOTE: "•" is displayed as shown in the left picture.

  #S -Electric heating sensor error. Unplug the unit and plug it back in. If error repeats, call for service.



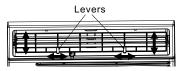
If the unit stops unexpectedly due to a power outage, it will restart with the previous function setting automatically when the power resumes.

#### **ADDITIONAL THINGS YOU SHOULD KNOW**

Now that you have mastered the operating procedure, here are more features in your control that you should become familiar with.

- The Cool circuit has an automatic 3 minute timedelay start if the unit is turned off and on quickly.
   This prevents overheating of the compressor and possible circuit breaker tripping. The fan will continue to run during this time.
- The control is capable of displaying temperature in degrees Fahrenheit or degrees Celsius. To convert from one to the other, press and hold the left and right Temp/Timer buttons at the same time for 3 seconds.

#### **Air Directional Louvers**



#### Air Direction

The louvers will allow you to direct the airflow up or down (on some models) and left or right throughout the room as needed. Pivot horizontal louvers until the desired up/down direction is obtained.

Move the levers from side to side until the desired left/right direction is obtained.

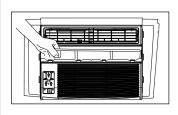
## **A** CAUTION

Clean your air conditioner occasionally to keep it looking new. Be sure to unplug the unit before cleaning to prevent shock or fire hazards.

#### Air Filter Cleaning

The air filter should be checked at least every two weeks to see if cleaning is necessary. Trapped particles in the filter can build up and cause an accumulation of frost on the cooling coils.

#### Air Filter Cleaning



#### **Air Filter Cleaning**

- Push the vent handle to the vent closed position (where applicable). Open the front panel.
- Take the filter by the centre and pull up and out.
- Wash the filter using liquid dishwashing detergent and warm water. Rinse filter thoroughly. Gently shake excess water from the filter. Be sure the filter is thoroughly dry before replacing. Or, instead of washing, you may vacuum the filter clean.

**Note:** Never use hot water over 40°C (104°F) to clean the air filter. Never attempt to operate the unit without the air filter.

### **Cabinet Cleaning**

- Be sure to unplug the air conditioner to prevent shock or fire hazard. The cabinet and front may be dusted with an oil-free cloth or washed with a cloth dampened in a solution of warm water and mild liquid dishwashing detergent. Rinse thoroughly and wipe dry.
- Never use harsh cleaners, wax or polish on the cabinet front.
- Be sure to wring excess water from the cloth before wiping around the controls. Excess water in or around the controls may cause damage to the air conditioner.
- · Plug in air conditioner.

#### Winter Storage

If you plan to store the air conditioner during the winter, remove it carefully from the window according to the installation instructions. Cover it with plastic or return it to the original carton.

Before calling for service, review this list. It may save you time and expense. This list includes common occurrences that are not the result of defective workmanship or materials in this appliance.

Problem	Solution		
Air conditioner	Wall plug disconnected. Push plug firmly into wall outlet.		
does not start.	House fuse blown or circuit breaker tripped. Replace fuse with time delay type or reset circuit breaker.		
	Plug current device tripped. Press the RESET button.		
	Power is OFF. Turn power ON.		
Air from unit does	Room temperature below 17 $^{\circ}$ C (62 $^{\circ}$ F ). Cooling may not occur until room temperature rises above 17 $^{\circ}$ C (62 $^{\circ}$ F).		
not feel cold enough.	Temperature sensing behind air filter element touching cold coil. Keep it from the cold coil.		
	Set to a lower temperature.		
	Compressor stopped when changing modes. Wait for 3 minutes after setting to the COOL mode.		
Air conditioner	Outdoor temperature below 18 °C (64°F). To defrost the coil, set FAN ONLY mode.		
cooling, but room is too warm- ice forming on cooling	Air filter may be dirty. Clean filter. Refer to Care and Cleaning section. To defrost, set to FAN ONLY mode.		
coil behind decorative front.	Thermostat set too cold for night-time cooling. To defrost the coil, set to FAN ONLY mode. Then, set temperature to a higher setting.		



Problem	Solution		
Air conditioner	Dirty air filter- air restricted. Clean air filter. Refer to Care and Cleaning section.		
cooling, but room is too warm– NO ice forming on cooling coil behind decorative front.	Temperature is set too high. Set temperature to a lowercase setting.		
	Air directional louvers positioned improperly. Position louvers for better air distribution.		
	Front of units is blocked by drapes, blinds, furniture, etc. – restricts air distribution. Clear blockage in front of unit.		
	Doors, windows, registers, etc., open- cold air escapes. Close doors, windows, registers		
	Unit recently turned on in hot room. Allow additional time to remove stored heat from walls, ceiling, floor and furniture.		
Air conditioner turns on	Dirty air filter- air restricted. Clean air filter.		
and off rapidly.	Outside temperature extremely hot. Set FAN speed to a higher setting to bring air past cooling coils more frequently.		
Noise when unit is	Air movement sound. This is normal. If too loud, set to a slower FAN setting.		
cooling.	Window vibration – poor installation. Refer to installation instructions or check with installer		
Water dripping INSIDE when unit is cooling.	Improper installation. Tilt air conditioner slightly to the outside to allow water drainage. Refer to installation instructions – check with installer.		
Water dripping OUTSIDE when unit is cooling.	Unit removing large quantity of moisture from humid room. This is normal during excessively humid days.		
Remote sensing deactivating	Remote control not located within range. Place remote control within 20' (6 m) and 1 radius of the front of the unit.		
prematurely (some models).	Remote control signal obstructed. Remove obstruction.		
Room too cold.	Set temperature too low. Increase set temperature.		

#### Handling the remote control



#### Location of the remote control.

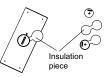
 Use the remote control within a distance of 16 1/2' (5 m) from the appliance, pointing it towards the receiver. Reception is confirmed by a beep.

#### **ACAUTIONS**

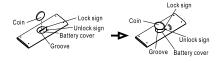
- The air conditioner will not respond to remote control instructions if curtains, doors or other materials block the signals from the remote control to the indoor unit.
- Prevent any liquid from falling into the remote control. Do not expose the remote control to direct sunlight or heat.
- If the infrared signal receiver on the indoor 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 control, either move these appliances or consult your local dealer.

### **Battery Installation**

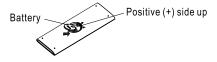
NOTE: First remove the insulation piece (if available) and then install the battery using to the following steps.



Step 1: Insert a coin vertically in the groove on the battery cover. Rotate clockwise 45 degrees ensuring the groove is aligned with the "unlock" sign as shown below then remove the battery cover.



Step 2: Install battery inside the remote control with the positive (+) side up.



Step 3: Replace the battery cover. Place so that the battery cover groove is aligned with the "unlock" sign. Insert a coin vertically in the groove and press it gently. Rotate counter-clockwise 45 degrees ensuring the groove is aligned with the "lock" sign as shown below.





### WARNING

- 1. Battery must be disposed of properly. Do not short circuit or dispose of in the fire.
- 2. Keep batteries out of the reach of children.
- 3. Do not ingest batteries.
- 4. Non-rechargeable batteries are not to be recharged.
- 5. Exhausted batteries are to be removed from the product.

### **Remote Control Specifications**

Model	RG15A(B)/E
Rated Voltage	3.0 V (Lithium battery CR2025)
Lowest Voltage of CPU Emitting Signal	2.4 V
Signal Receiving Range	16 1/2' (5 m)
Environment	23 to 140°F (-5 to 60°C)

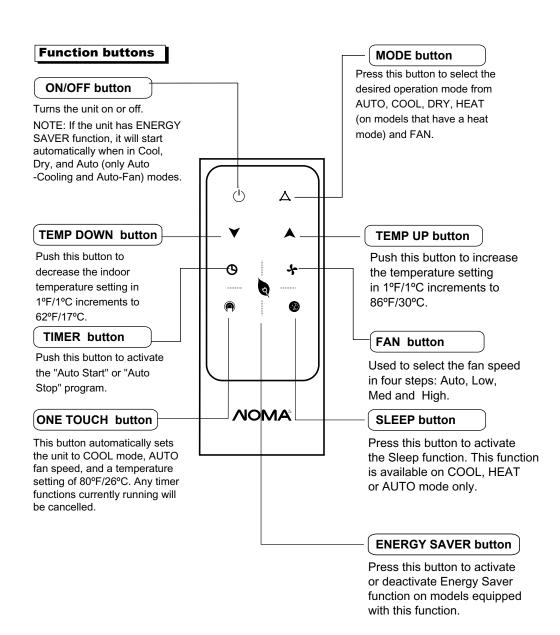
#### NOTE:

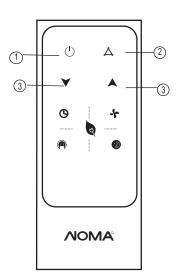
- -Buttons design is based on typical model and might be slightly different from the actual one you purchased. In the event of a discrepancy, the actual shape shall prevail.
- -If there is a function on the remote control that is not available on the unit, no action will happen when the relative remote button is pressed.
- -When there are wide differences between the remote control instructions and USERS MANUAL on function description, the description in the USERS MANUAL shall prevail.

**A** WARNING: Chemical Burn Hazard. Keep batteries away from children.

This product contains a lithium button/coin cell battery. If a new or used lithium button/coin cell battery is swallowed or enters the body, it can cause severe internal burns and can lead to death in as little as 2 hours. Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

The cells shall be disposed of properly, including keeping them away from children. Even used cells may cause injury.





#### How to use the buttons

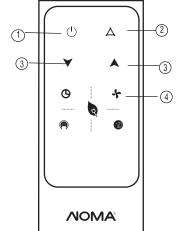
#### Auto

Ensure the unit is plugged in and power is available.

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

#### NOTE:

- In Auto mode the air conditioner can choose between Cool, Fan and Heat to maintain the ambient room temperature at the level set by the remote control.
- 2. In Auto mode the fan speed is automatically controlled and cannot be changed.
- 3. If Auto mode is not comfortable for you, the desired mode can be selected manually.



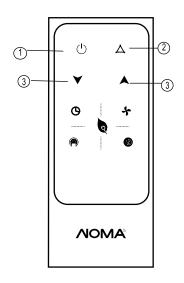
#### **Cooling /Heating/Fan**

Ensure the unit is plugged in and power is available.

- Press the **ON/OFF** button to start the air conditioner.
- Press the MODE button to select Cool or Fan mode.
- 3. Press the **TEMP UP/DOWN** button to set the desired temperature. The temperature can be set within a range of 62°F/17°C to 86°F/30°C in 1°F/1°C increments.
- Press the FAN button to select the fan speed in four steps: Auto, Low, Med, or High.

### **NOTE:**

In Fan mode, the set temperature is not displayed on the LCD display and you are not able to control the room temperature. In this case, only step 1, 2 and 4 may be performed.



#### **Dehumidifying**

Ensure the unit is plugged in and power is available.

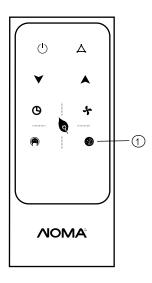
- Press the **ON/OFF** button to start the air conditioner.
- 2. Press the **MODE** button to select Dry.
- 3. Press the **TEMP UP/DOWN** button to set the desired temperature. The temperature can be set within a range of 62°F/17°C to 86°F/30°C in 1°F/1°C increments.

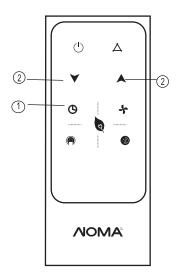
#### NOTE

In Dehumidifying mode, you can not switch the fan speed. It is automatically controlled.

#### Sleep

- Press this button to activate the Sleep function. This function is available on COOL, HEAT or AUTO mode only.
- In this mode the temperature will increase by 2°F/1°C 30 minutes after the mode is selected. The temperature will then increase by another 2°F/1°C after an additional 30 minutes. This new temperature will be maintained for 6 hours before it returns to the originally selected temperature. This entitle the Sleep operation and the unit will continue to operate as originally programmed.
- The Sleep function can be cancelled by pressing the MODE, ON/OFF, FAN SPEED or SLEEP button during operation.





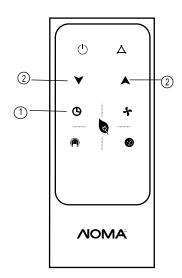
#### **Timer**

Use the TIMER button to Auto-start or Auto-stop the unit.

#### To set the Auto-start/stop time.

- Press the TIMER button. When the TIMER
   ON LED indicator is lit, it indicates the Auto
   Start program is initiated. When the TIMER
   OFF LED indicator is lit, it indicates the Auto
   Stop setting program is initiated.
- Press or hold the Up (▲) or Down (▼) to change the Auto time by 0.5 hour increments, up to 10 hours, then at 1 hour increments up to 24 hours. The control will count down the time remaining until start/stop.
- The selected time will register in 5 seconds and the air conditioner will automatically revert back to display the previous temperature setting.
- 4. Turning the unit ON or OFF at any time will cancel the Auto-start/stop function.

**NOTE:** To cancel the TIMER setting, push the TIMER button and press or hold the Up (▲) or Down (▼) until 0 hour is displayed on the LCD display on the air conditioner.



#### **COMBINED TIMER**

(Setting both ON and OFF timers simultaneously)

## **AUTO STOP** → **AUTO START**

(On → Stop → Start operation)

This feature is useful when you want to stop the air conditioner 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 2 hours after setting and start it again 10 hours after setting.

- Press the TIMER button until the TIMER OFF LED indicator is lit on the air conditioner.
- Use the UP/DOWN button to display "2.0" on the LCD display on the air conditioner.
- 3. Press the TIMER button until the TIMER ON LED indicator light is lit.
- 4. Use the UP/DOWN button to display "10" on the LCD display on the unit.
- 5. Wait for 5 seconds until the LCD window reverts back to the previous display.

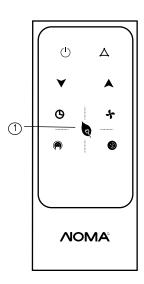
## AUTO START→ AUTO STOP (Off → Start → Stop operation)

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

### Example:

To start the air conditioner 5 hours after setting, and stop it 8 hours after setting.

- Press the TIMER button until the TIMER
   ON LED indicator is lit on the air conditioner.
- Use the UP/DOWN button to display5.0" on the LCD display of the air conditioner.
- 3. Press the TIMER button again until the TIMER OFF LED indicator light is lit on the unit.
- 4. Use the UP/DOWN button to display "8.0" on the LCD display of the unit.
- 5. Wait for 5 seconds until the LCD window reverts back to the previous display.



## **Energy saver**

In this mode, the fan will continue to run for 3 minutes after the compressor shuts off. The fan then cycles on for 2 minutes at 10 minute intervals until the room temperature is above the set temperature, at which time the compressor turns back on and cooling starts.

#### NOTE:

- -The device could comply with the local national regulations. In Canada, it should comply with CAN ICES-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 this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged 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 that to which the receiver is connected.
- •Consult the dealer or an experienced radio/TV technician for help. Changes or modifications not approved by the party responsible for compliance could void user's authority to operate the equipment.

This product carries a 1 year warranty against defects in workmanship and materials. Noma Canada agrees to replace a defective product, within the stated warranty period, when returned to the place of purchase with proof of purchase. This product is not guaranteed against wear or breakage due to misuse and/or abuse.

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