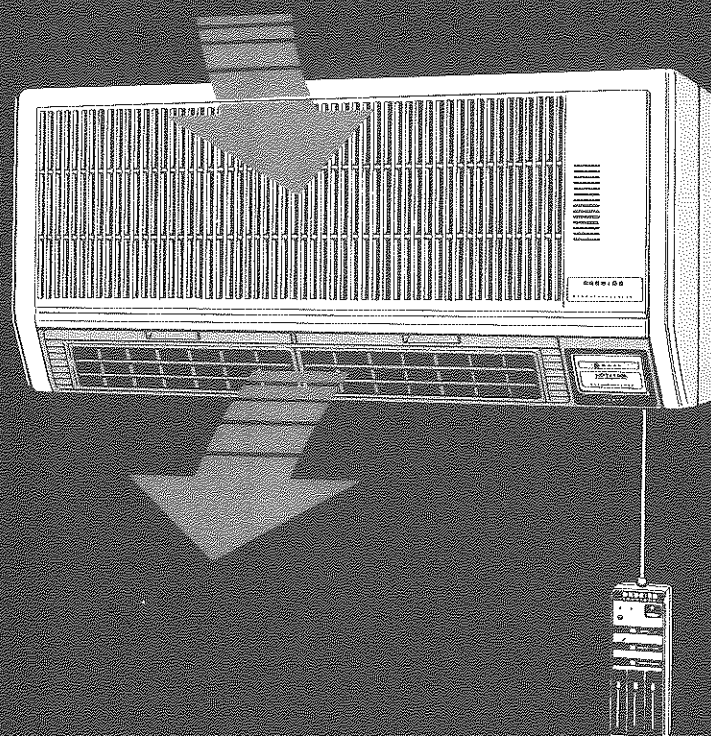




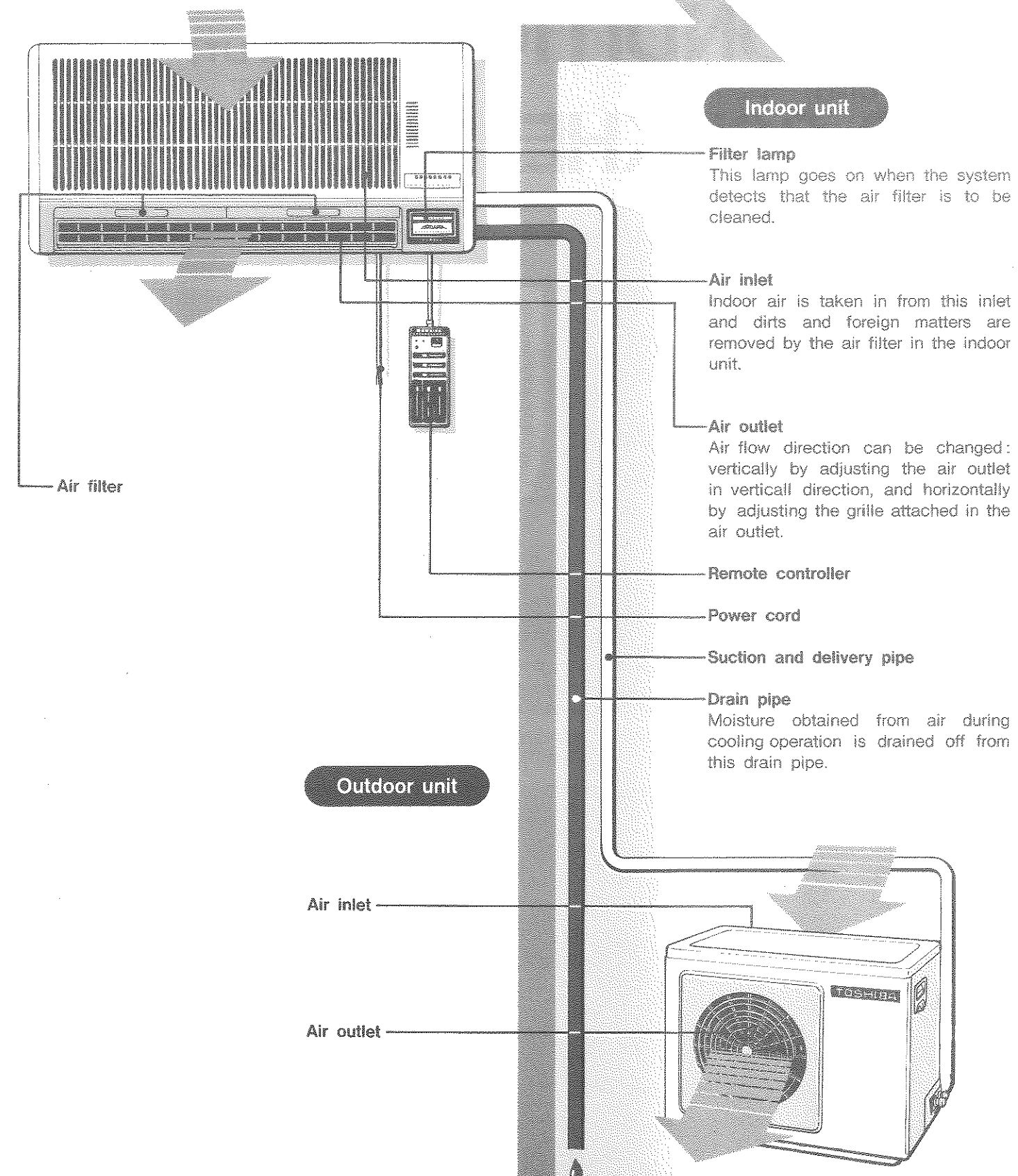
AIR CONDITIONER (SPLIT)

INDOOR UNIT OUTDOOR UNIT

RAS-30PKHE RAS-30PAHE



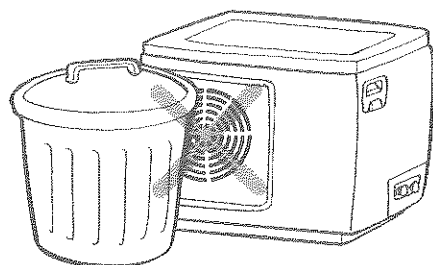
PARTS NAME



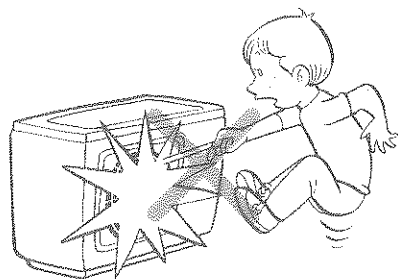
PRECAUTIONS FOR PROPER USE OF AIR CONDITIONER



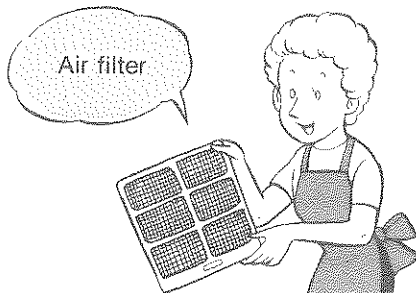
Never use the plug as a switch.



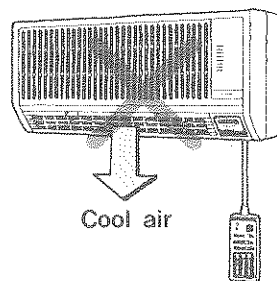
Never block up the air inlet and outlet of indoor and outdoor unit.



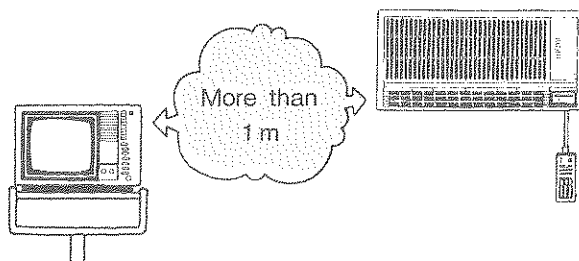
Never poke a rod into the air inlet or air outlet of the indoor and outdoor unit.



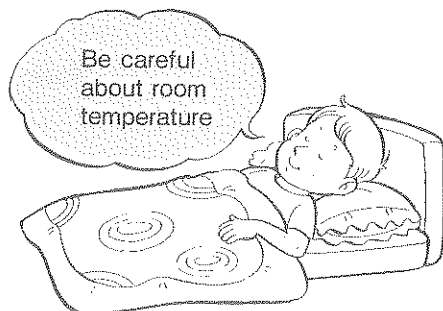
Be sure to set the air filter in position.



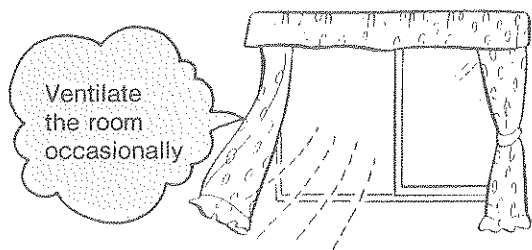
Be sure to change the air blowing direction by turning the rotary grille as required by the cooling or heating direction. Refer to explanations on page 12 for details.



Air conditioner and remote controller should be separate from TV sets and radio receiver more than 1 m.

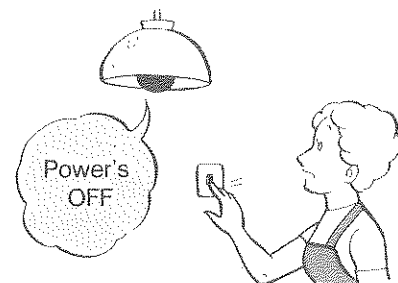


Be sure to keep the room temperature comfortably, especially using for the handicapped, nursing baby, small child, the old, or patient.

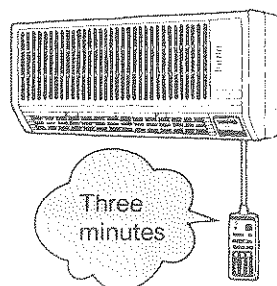


When running the air conditioner, the room is liable to be kept closed. Ventilate the room with fresh air occasionally.

MINIMUM KNOWLEDGE NECESSARY FOR OPERATION



When power is off during operation, all the air conditioner functions will be reset automatically. To reset the air conditioner after restoration of the power system, follow all the necessary start up sequence by working the control buttons.



- Wait at least 3 minutes before restarting.
The air conditioner is provided with microcomputer-assisted protection for 3 minutes. When the protection is in action the blower alone will be run, and about 3 minutes later the cooling or heating operation will be started automatically.
- When the power cord is plugged to the socket, the operation is same to above.

● Operate the air conditioner under correct conditions as specified below.

	Outdoor temperature	Room temperature	Room humidity
Cooling	21℃ ~ 43℃	21℃ ~ 32℃	Less than 80%
Heating	Less than 21℃	Less than 28℃	

CAUTION

In the heating operation, the outdoor unit may be frosted and outdoor fan motor will be stopped, depending on the outdoor temperature and humidity.

In such case, white fog will send up from outdoor unit, but this is not failure. Air conditioner is in automatic defrosting.

● Heating capacity.

In the heating cycle, heat is absorbed from outdoor and released into the room.

That is so-called heat pump system.

Heating capacity is therefore dependent on the outdoor temperature and right table shows the heating capacity by outdoor temperature.

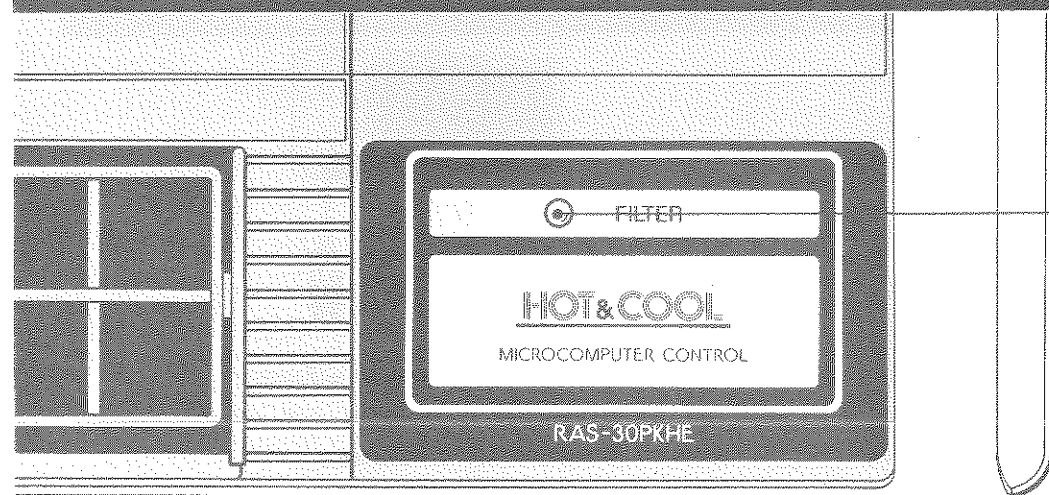
When the outdoor temperature is too low, you are recommended to use other heating unit in combination with the air conditioner.

Room temperature	Outdoor temperature	Heating capacity
21℃	10℃	15,170
	7℃	14,000
	0℃	11,480

The specified heating performance can be obtained:

Room temperature 21℃
Outdoor temperature 7℃

CONTROLS AND THEIR FUNCTIONS



DEFROST lamp

This lamp goes on during defrost operation or in the initial stage of heating operation.

COOL/HEAT lamp

This lamp remains on during cooling or heating operation. After the room temperature is set to the reset temperature, the lamp goes off automatically and the air conditioner starts blowing air.

FILTER button

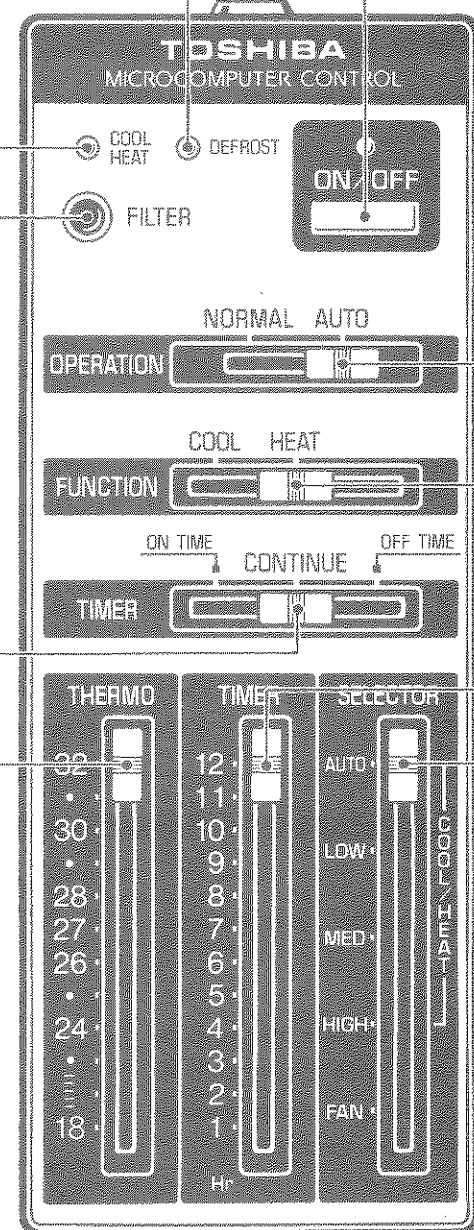
The FILTER lamp goes off if this button is pushed.

TIMER knob

The air conditioner starts or stops its operation after the preset time period if this knob is set to **ON TIME** or **OFF TIME**. The air conditioner continues its operation if this knob is set to **CONTINUE**.

THERMO knob

Use this knob for adjusting room temperature. The number indicates the setting room temperature.



FILTER lamp

This lamp goes on when the system detects that the air filter is to be cleaned.

ON/OFF button

Push this button, then the air conditioner starts its operation and the lamp goes on. The lamp goes off and the air conditioner stops its operation if the button is pushed again.

OPERATION knob

Set this knob to **NORMAL** operation or **AUTO** operation.

FUNCTION knob

The air conditioner runs cooling operation when this knob is set to **COOL**, while it runs heating operation when this knob is set to **HEAT**.

TIMER knob

This knob is used to set time for **ON TIME** or **OFF TIME** operation. The air conditioner starts or stops its operation at specified time. You can set the time in hour units.

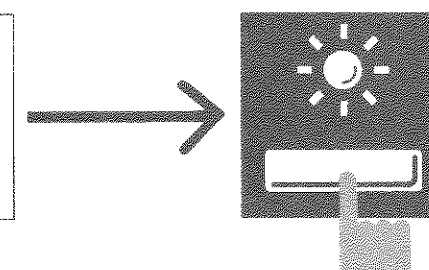
SELECTOR knob

Use this knob to change air flow rate. When the knob is set to **AUTO**, air flow rate can be automatically changed for High, Medial, or Low depending on the room temperature.

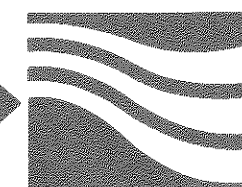
OPERATING SEQUENCE AND MODES OF OPERATION

This air conditioner is equipped with microcomputer for automatic control, convenience and comfort. The following operations can be carried out with simple controls.

Connect the power cord plug into the wall socket.



Push the **ON/OFF** button.



NORMAL operation.

Ordinary cooling or heating operation is carried out. (See page 6)



AUTO

After 5 hours of running, your air conditioner is automatically stop. (See page 7)



TIMER operation.

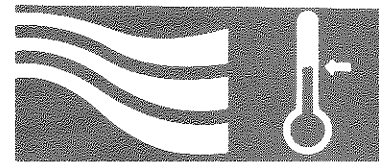
Air conditioner will be start (**ON TIME**) or stop (**OFF TIME**) after passing the setting time. (See page 8, 9)

The **ON/OFF** lamp blinks on the remote controller. If **ON/OFF** lamp does not blink, remove the power supply socket, then insert it again after at least 5 seconds.

NORMAL OPERATION



1		Set the knob to NORMAL .	
2		Set the knob to COOL . Set the knob to HEAT .	(In case of cooling operation desired.) (In case of heating operation desired.)
3		Set the knob to a desired position.	<ul style="list-style-type: none">● At AUTO, the fan speed will change high, medial or low speed depending on the room temperature.● You can get the desired position too.● If you set the knob to FAN position air conditioner will operate only fan.
4		Set the knob to a desired position.	
5		Set the knob to CONTINUE .	Refer to explanation about TIMER operation on page 8 for details.
6		Push the ON/OFF button.	The lamp will go on and air conditioner will start.
7		Push the ON/OFF button again.	The lamp will go out and air conditioner will stop.



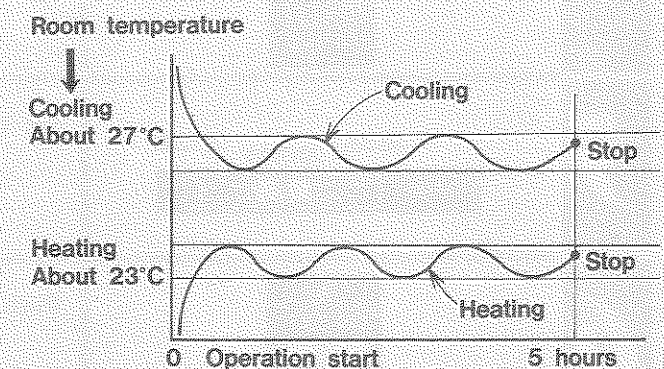
AUTO OPERATION

1		Set the knob to AUTO .	
2		Set the knob to COOL . Set the knob to HEAT .	(In case of cooling operation desired.) (In case of heating operation desired.)
3		Set the knob to AUTO .	
4		Set the knob to CONTINUE .	Refer to explanation about TIMER operation on page 8 for details.
5		Push the ON/OFF button.	The lamp will go on and air conditioner will start.
6			After 5 hours of operation, air conditioner will stop automatically.
		AUTO operation → Stop Push the ON/OFF button again. Lamp will go out and air conditioner will stop.	AUTO operation → NORMAL Set the OPERATION knob to NORMAL .

AUTO operation.

In the **AUTO** operation, the room temperature is automatically controlled at about 27°C in the cooling and at about 23°C in the heating irrespective of the **THERMOSTAT** setting.

- In the **AUTO** operation, the fan speed is changed automatically High, Medial or Low depending on the room temperature.

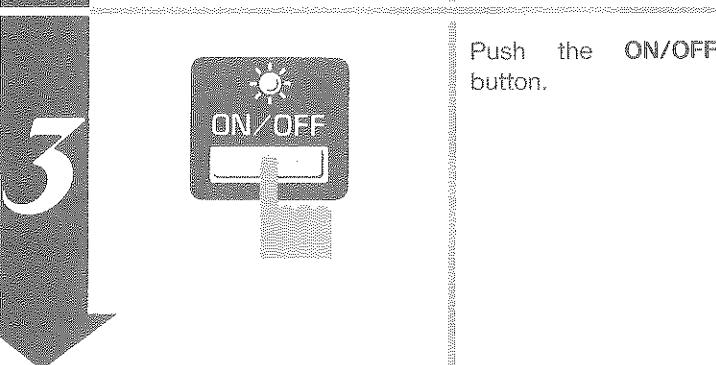
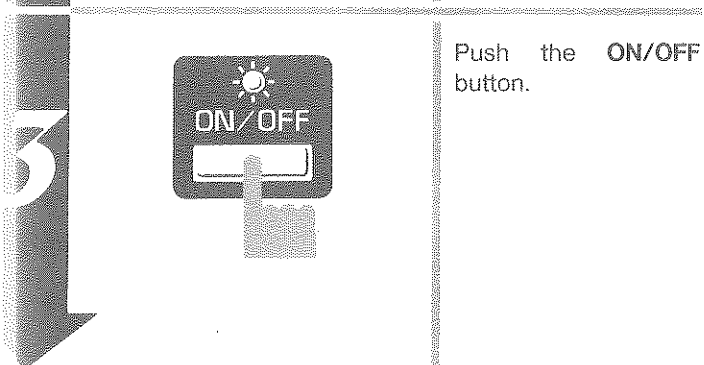
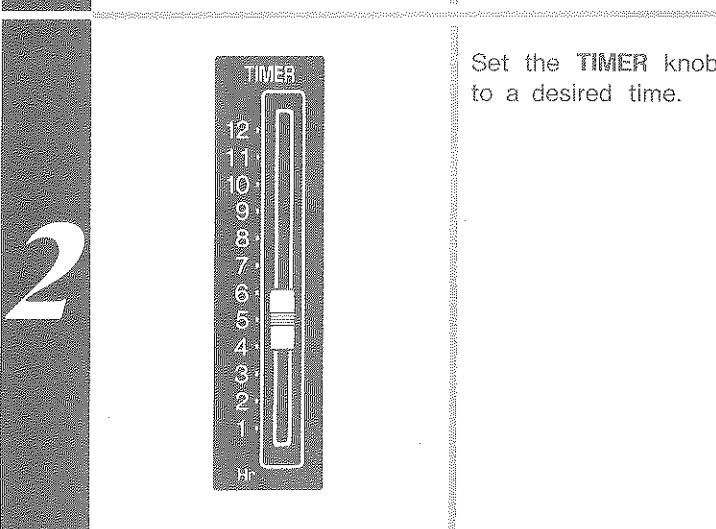
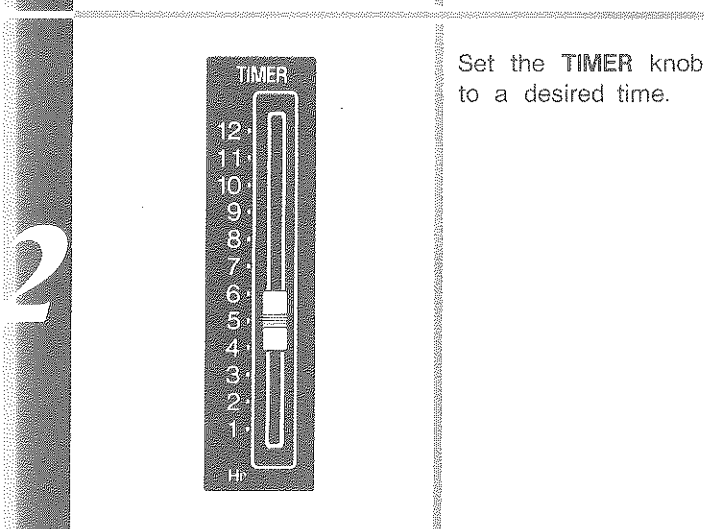
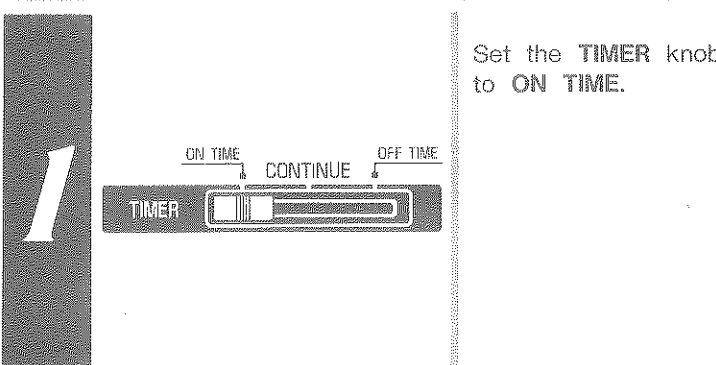
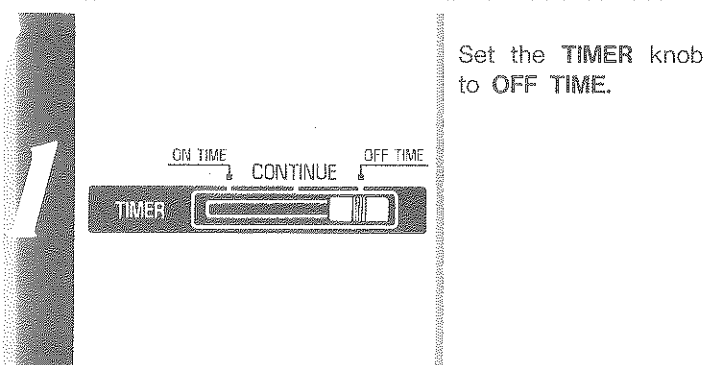
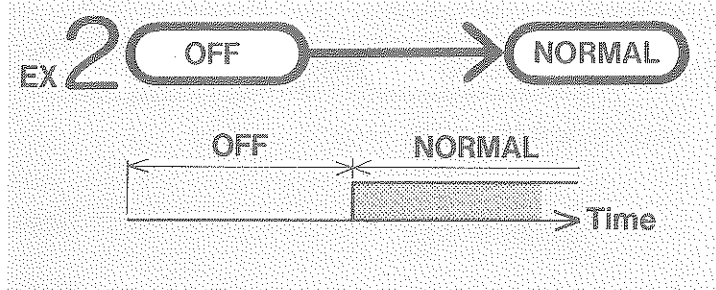
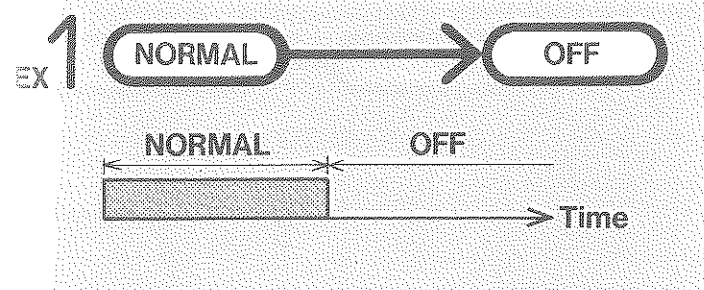


CAUTION

FAN SELECTOR knob at **FAN** position, air conditioner runs fan only.
Even if that knob set to **HIGH**, **MED** or **LOW** the

fan speed will be changed automatically depending on the room temperature.

TIMER OPERATION

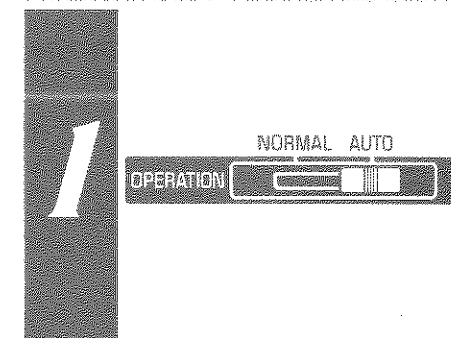
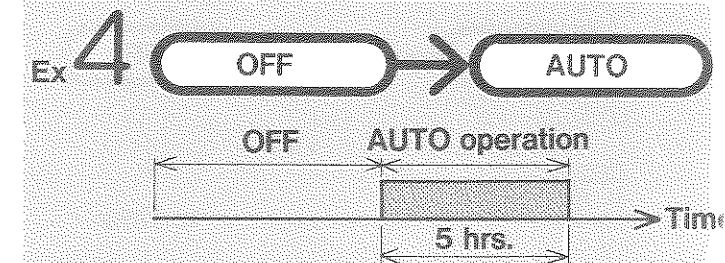
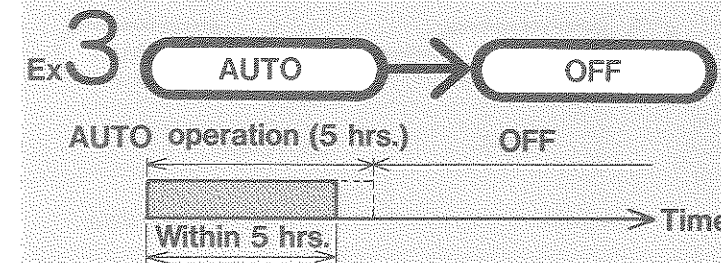


Set the **TIMER** operation time in hour units, that is, 12 steps from 1 hour to 12 hours. Refer to explanations about timer setting control on page 10 for details.

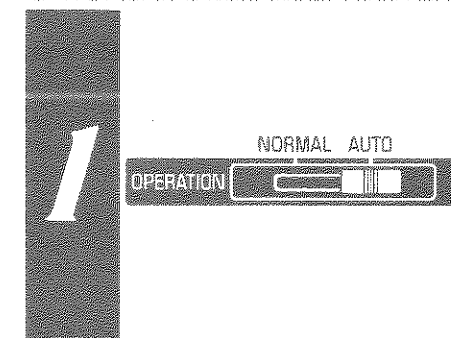
Set the **TIMER** knob at **ON TIME** or **OFF TIME**. This means these two conditions can not be set at the same time.



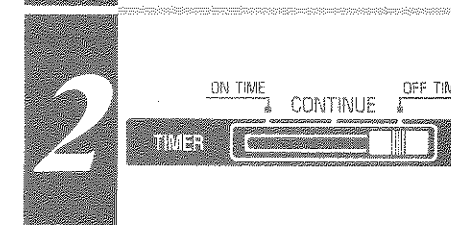
TIMER OPERATION



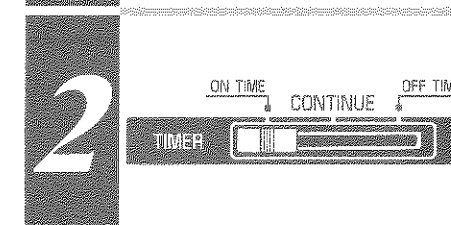
Set the OPERATION knob to **AUTO**.



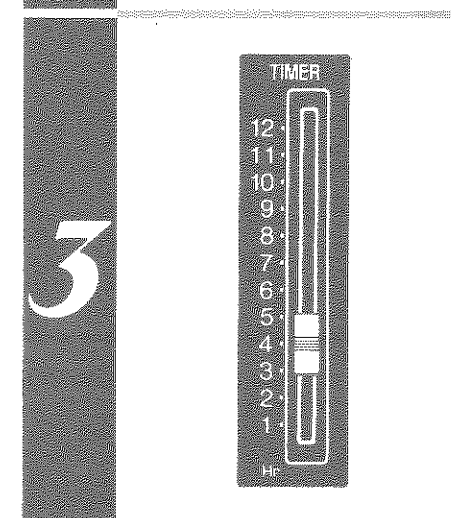
Set the OPERATION knob to **AUTO**.



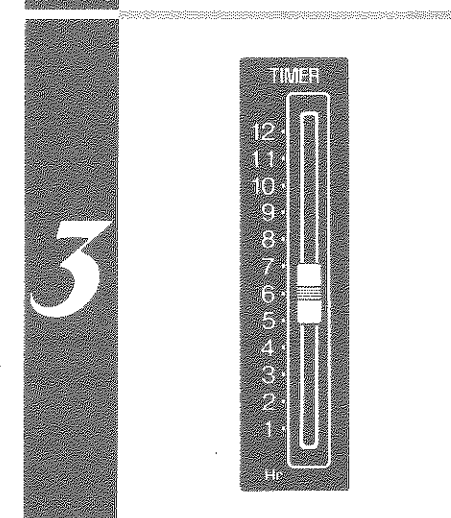
Set the TIMER knob to **OFF TIME**.



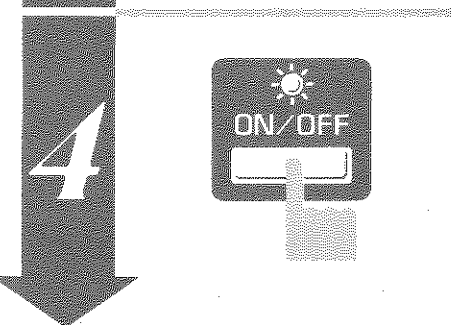
Set the TIMER knob to **ON TIME**.



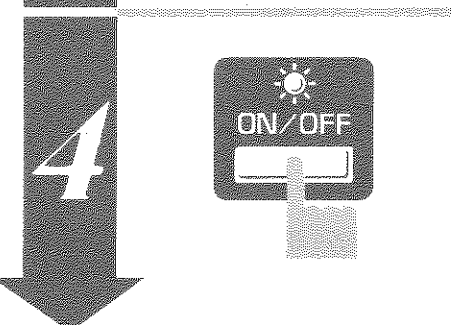
Set the TIMER knob to a desired time within 5 hrs.



Set the TIMER knob to a desired time.



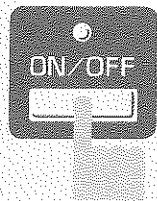
Push the **ON/OFF** button.



Push the **ON/OFF** button. Operation will be stopped and the timer set time is up, air conditioner will start automatically.

In the combination of **AUTO** operation and **OFF TIME** operation, the maximum timer set time is 5 hours.

TO TURN OFF THE AIR CONDITONER DURING TIMER OPERATION



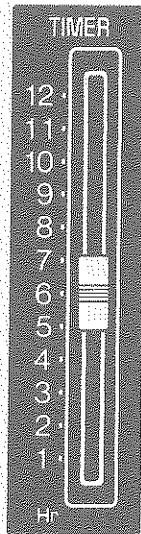
Push the **ON/OFF** button again.
All the lamps will go out and the timer will be released.
At the same time, the air conditioner will be turned off.

TO RELEASE THE TIMER OPERATION BEFORE THE TIMER TIME IS UP.

Set the **TIMER** knob to **CONTINUE**.



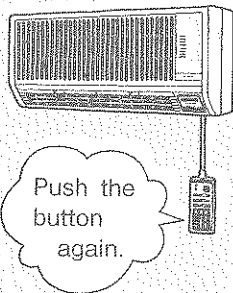
TO CHANGE THE TIMER SET TIME DURING TIMER OPERATION



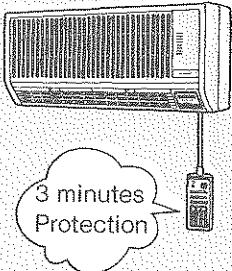
Set the **TIMER** knob to a desired time. The timer will operate from now to the newly set timer time.

CAUTION

When a blackout happens, all the operation will be stopped.
After restoration of power, do the start up sequence over again.



When 3 minutes protection is in action, the outdoor unit will remain at reset even when the **COOL** or **HEAT** lamp is a glow.

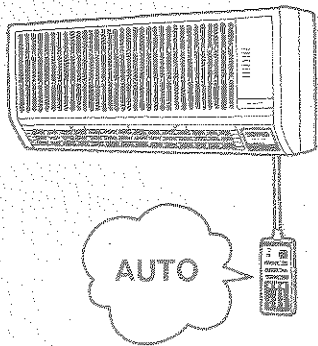


DEFROST LAMP



The **DEFROST LAMP** will go on during the defrosting. After 2 to 10 minutes the lamp will go out, and the heating operation will be restarted automatically. During defrost operation, the indoor fan will be turned off. In cases other than defrost operation, the lamp may light up in the initial stage of heating or thermostat control for several minutes until the machine is warmed up.

OPERATION OF INDOOR FAN

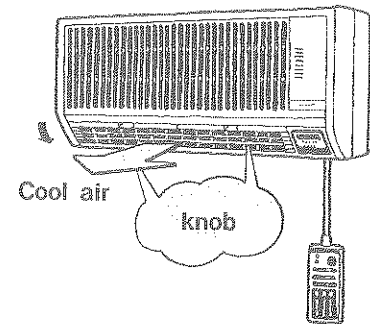


- When the **FAN SELECTOR** knob is set to **AUTO**, the air conditioner will change the fan speed automatically depending on the room temperature. (3 steps)
(In the heating operation, the fan will be run at **HIGH** speed when the room temperature is lower and at **LOW** speed when the room temperature is higher)
- When the heating operation is started with the room temperature below a certain value, the fan will remain at rest until the indoor heat exchanger is warmed up to a specified level.

HOW TO USE THE ROTARY GRILLE

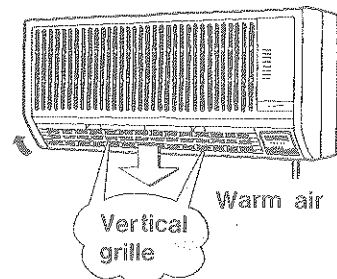
Front blow

- In case of cooling, be sure to set the rotary grille to blow the air from the front.



Downward blow

- In case of heating, the rotary grille opening should be directed downward for improved heating efficiency.



- Hold the rotary grille at both ends and turn in the arrow direction each.
- The lateral air flow direction can be adjusted by turning grille's knob and the vertical grill of the rotary grille.

CAUTION

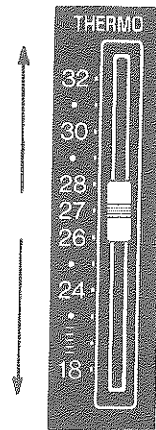
If the rotary grille opening is set downward when your air conditioner is cooling, the rotary grille surface may sweat and drip condensate.

AIR CONDITIONER TIPS

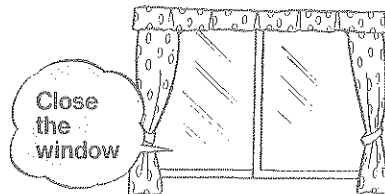
THERMO

To raise the room temperature

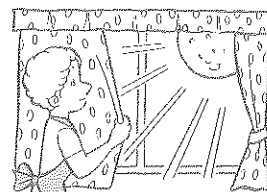
To lower the room temperature



The thermostat turns on and off the air conditioner automatically to keep the room at a proper temperature namely, it performs cooling and heating economically by making good use of electric power.



Do not leave the door and window wide open.

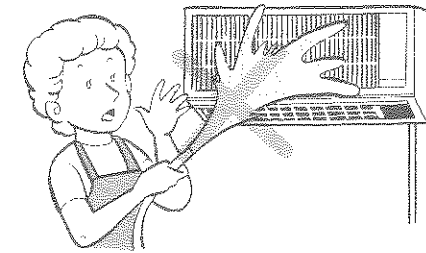


Pull the curtain or blind on the window to keep off the sun. This will improve the cooling efficiency.

If a heat appliance such as boiler or range is used in the room during cooling operation the cooling efficiency will be lowered.

FOR MAINTENANCE

When servicing the air conditioner, be sure to turn off the air conditioner and main switch.



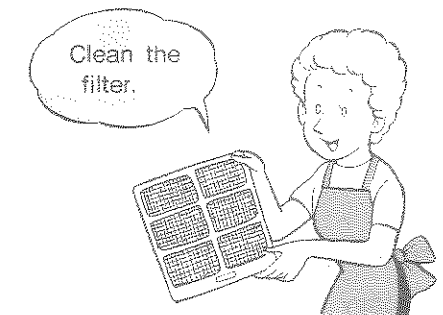
Under any circumstances, do not flush the indoor unit with water for cleaning. You may be got electric shock.

How to maintain the air filter.

If the air filter becomes clogged with dust, smooth air flow is obstructed and operating efficiency becomes low. Clean the air filter whenever the FILTER lamp is lit. In this system, the FILTER lamp goes on when system operation time reaches approximately 120 hours; therefore, clean the air filter every two weeks if the air conditioner is used in a dusty place.

CAUTION

Since the system operation time is cleared to zero each time power failure occurs or the power socket is removed during the system operation, the FILTER lamp may not go on even if the actual system operation time reaches 120 hours.

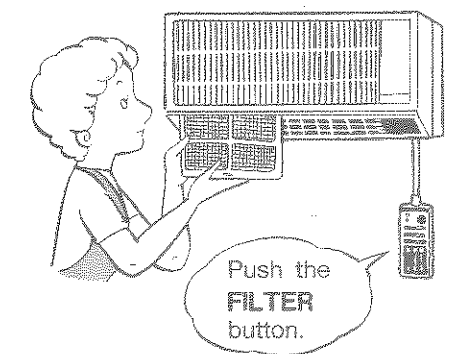


How to remove and reassemble the air filter.

A light pull to the center of the air filter, and pull downward. To reinstall in position, push in right upward until a click is heard.

(There is one air filter installed on either side.)

Push the FILTER button after the air filter is reassembled. (The FILTER lamp goes off and the system operation time is cleared to zero.)



How to clean the air filter.

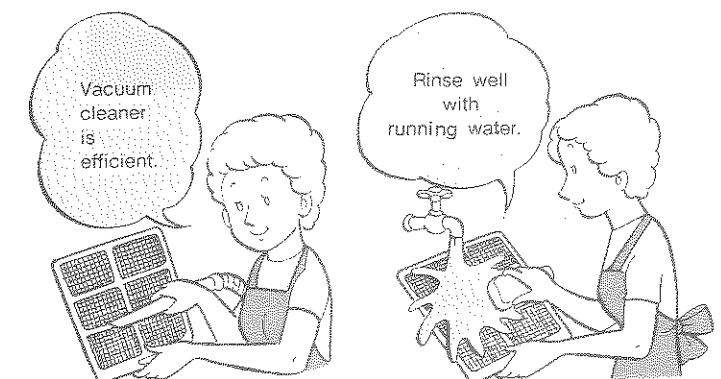
To remove dust from the air filter, use a vacuum cleaner or pat it to dislodge the dust.

If the air filter is fouled seriously, immerse into lukewarm water and shave up and down.

The water temperature should be held below 40°C.

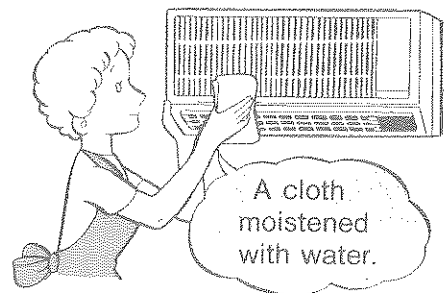
After washing, rinse with water, and leave the air filter in the shade until dry.

Then, put the air filter in the indoor unit as it was before.



How to clean soiled cabinet

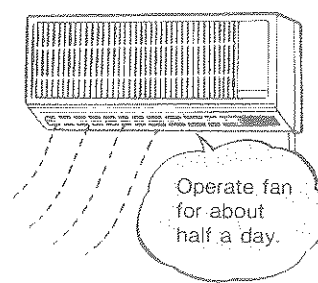
Clean with a cloth moistened with water (less than 40℃), and polish with a dry cloth.



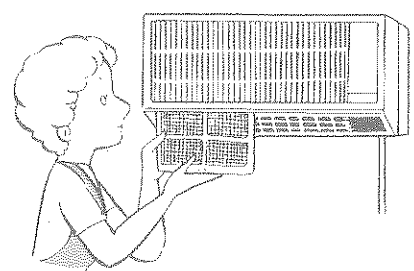
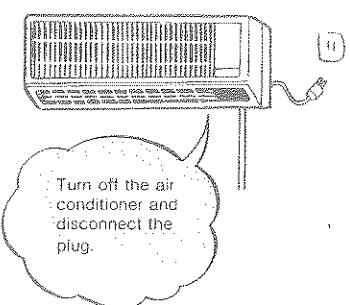
CAUTION

Never use gasoline, bengine, thinner and similar solvents as a cleaning agent.
Never spray liquid insecticide or similar liquids.
The paints may peel off, or the plastics may be cracked or deformed.

Care after season



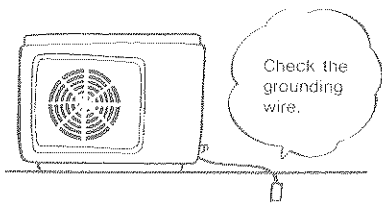
In order to dry up the machine inside.



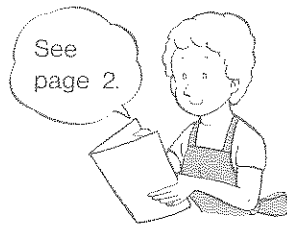
Clean the air filter, dry well and replace as it was.

Check up before season

Make sure that the grounding wire is not broken or disconnected.



Strictly observe the "PRECAUTIONS FOR PROPER USE OF AIR CONDITIONER" on page 2.



Inspection and maintenance

After several season of use, the air conditioner may degrade in performance because its inside may be fouled depending on the service conditions.

For the inspection and maintenance, consult your, Toshiba agent.

OBSERVANCES FOR EXTENDED USE

Installation

- 1 Your air conditioner removes moisture from the room air when cooling.
Arrange a pipe to drain all water out of the unit.
- 2 Don't install the unit in a hazardous location where combustible gas or vapor is likely to concentrate in the air.
- 3 If the air conditioner is operated in an atmosphere containing oils (machine oil), salt near a coastal area sulfide gas near a hot spring, etc.
Such substances may lead to failure of the unit.

Concern against noise

- 1 A sturdy place that can bear the weight of air conditioner.
- 2 Install at such a place that will prevent the hot air and noise of the outdoor unit worrying your neighbors.
- 3 Don't install obstacles in front of the blow off of the outdoor unit.

Wiring

- 1 Ground the air conditioner for prevention of electric shock.
- 2 Provide an outlet for exclusive use with your air conditioner.
- 3 Loads connected in multiple together with the air conditioner might possibly cause over heat or even a fire accident.
- 4 Never pull the power cord and remote controller cord tight.
- 5 In some states, it is mandatory to use a leakage breaker for prevention of electric shock hazards.
For details, consult your Toshiba agent.

WARNING

THIS APPLIANCE MUST BE EARTHED.

IMPORTANT

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

Green and Yellow	—EARTH
Blue	—NEUTRAL
Brown	—LIVE

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug, proceed as follows:

Connect GREEN AND YELLOW coloured core to plug terminal marked letter 'E' or Earth Symbol or coloured Green or Green and Yellow.

Connect BROWN coloured core to plug terminal marked letter 'L' or coloured Red.

Connect BLUE coloured core to plug terminal marked letter 'N' or coloured Black.

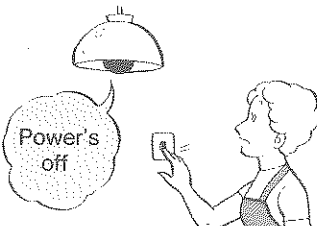
Relocation

If you move out or if it is desired to relocate the air conditioner, consult your Toshiba agent.

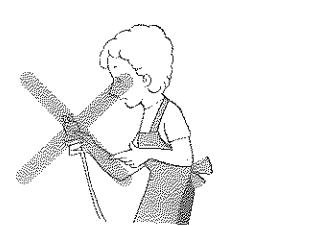
TROUBLES AND CAUSES

Before requesting servicing, check the following points.

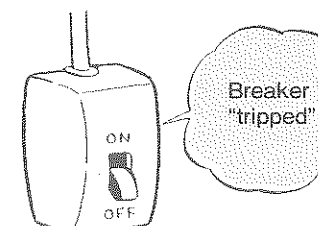
If your air conditioner does not run



Is the commercial line out?

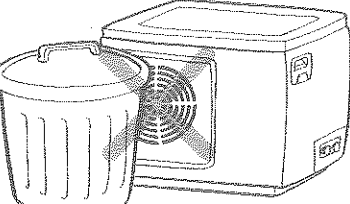


Is the cord plugged into the outlet?

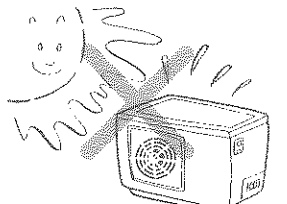


Is the breaker tripped?

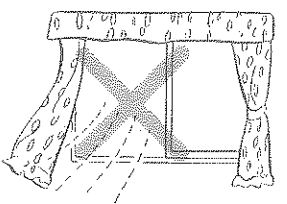
If your air conditioner delivers air, but does not cool the room



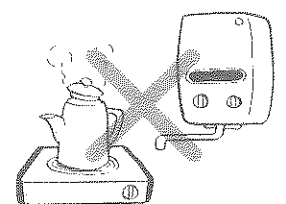
The outdoor unit air outlet or inlet is blocked or ventilation is poor.



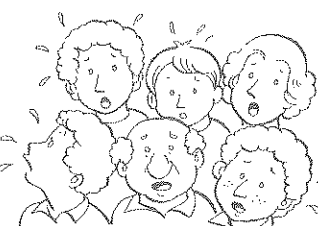
Outdoor unit temperature is abnormally high due to application of direct sunlight or heat from some other source.



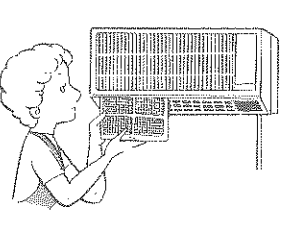
Is the door or window left open?



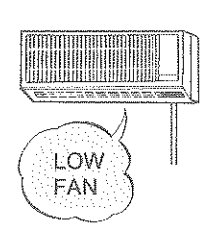
Are you using a boiler or range in the room?



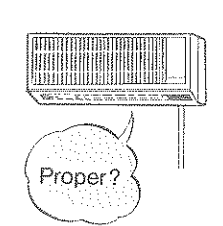
Too many people in the room?



Is the air filter clogged up with dust?

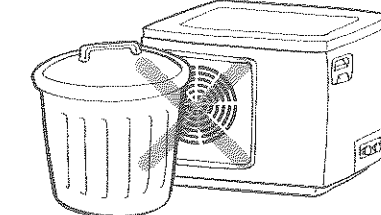


"FAN SELECTOR" knob left to "LOW"?

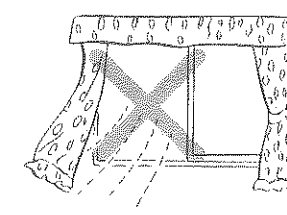


Is the THERMOSTAT set to a proper room temperature?

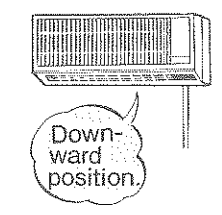
If your air conditioner delivers air, but does not heat the room



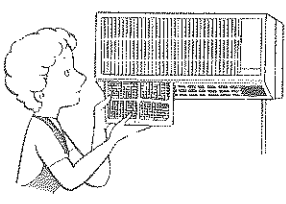
The outdoor unit air outlet or inlet is blocked or ventilation is poor.



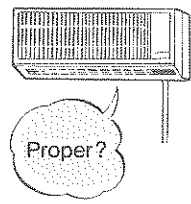
Is the door or window left open?



Is the rotary grille directed downward?



Is the air filter clogged up with dust?



Is the THERMOSTAT set to a proper heating temperature?

SPECIFICATIONS

MODEL	Indoor unit RAS-30PKHE	Outdoor unit RAS-30PAHE
Type	Reverse Cycle, Split type.	
Power supply	1φ, 50Hz, 220/240V	
Cooling Capacity	12,000 Btu/h	
Amps	0.26A	6.44A
Watts	60W	1390W
Heating Capacity	14,000 Btu/h	
Amps	0.26A	5.04A
Watts	60W	1090W
Net weight	20kg	41kg
Dimensions		
Width	920 mm	720 mm
Hight	380 mm	525 mm
Depth	250 mm	320mm

● The specifications may be subject to change without notice for purpose of improvement.



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