

**8. WINDOW TYPE
ROOM AIR-CONDITIONER
(Air cooled, Cooling only type)**

WR50CEPU

WR70CEPU

WR90CEPU

CONTENTS

8.1	GENERAL INFORMATION	247
8.1.1	Specific features	247
8.1.2	How to read the model name	247
8.2	SELECTION DATA	248
8.2.1	Specifications	248
8.2.2	Range of usage & limitations	249
8.2.3	Exterior dimensions	249
8.2.4	Piping system	251
8.3	ELECTRICAL DATA	251
8.3.1	Electrical wiring	251
8.4	OUTLINE OF OPERATION CONTROL BY MICROCOMPUTER	253
8.5	APPLICATION DATA	255
8.5.1	Electrical requirements	255
8.5.2	Installation	256
8.5.3	Operation	259
8.5.4	Maintenance	264
8.6	TROUBLE SHOOTING	266

8.1 GENERAL INFORMATION

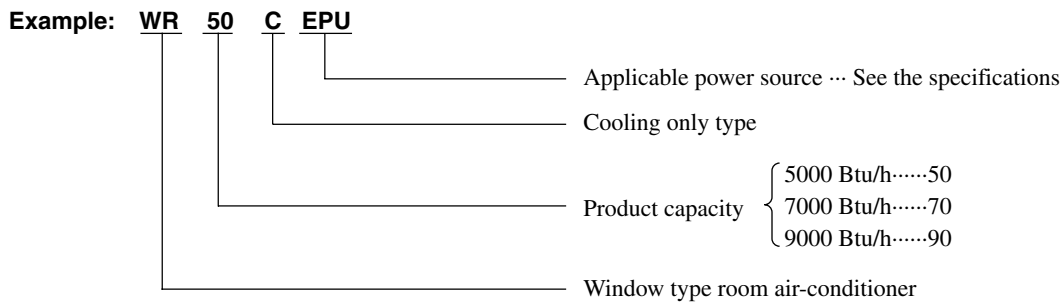
The “Mitsubishi Daiya” room air-conditioner: **WR** series are window type and the refrigerant is precharged at factory.

WR series are designed for cooling operation only. These air conditioners can be installed a window, and required work is wiring to the power source.

8.1.1 Specific features

- (1) Equipped with high-performance rotary compressor (WR50) and scroll compressor (WR70, 90) for low-noise operation.
- (2) A card-type remote controller is provided as standard equipment.
- (3) The ON and OFF timer can be set at one-hour intervals for 12 hours.
- (4) Three-speed fan switching (LO, MED, HI) is provided.
- (5) Energy-saving switch provides low-energy operation. (Refer to page 253)

8.1.2 How to read the model name



8.2 SELECTION DATA

8.2.1 Specifications

Models WR50CEPU, 70CEPU, 90CEPU

Item		Model	WR50CEPU	WR70CEPU	WR90CEPU
Power source			1 Phase 115V 60Hz		
Cooling capacity		BTU/H	5300	7000	9300
Operation data	Power consumption	W	530	700	948
	Running current	A	4.7	6.2	8.4
	Compressor L.R.A	A	26	27	45
	Energy efficiency ratio	BTU/HW	10.0	10.0	9.8
Front panel color			Noble white		
Exterior dimensions Height × Width × Depth		in	13 9/16" × 18 7/8" × 17 5/16"	14 3/4" × 20 7/8" × 21 3/4"	
Net weight		lb	55.1	72.5	72.5
Compressor Type & Q'ty			RM5455GQ83 × 1	GR5465GQ1 × 1	GR5490GQ1 × 1
Compressor motor		kW	0.45	0.55	0.70
Starting method			Line starting		
Evaporator (Inside)			Louver fines & Tubing		
Condenser (Outside)			Louver fines & Tubing		
Refrigerant control			Capillary tubes		
Refrigerant charge amount		OZ	13.8	16.2	15.2
Inside fan			Centrifugal fan		
Outside fan			Propeller fan (with slinger ring)		
Fan motor		W	24	63	68
Air flow (Dry coil)	Inside	CFM	290	430	430
	Outside	CFM	490	770	770
Air filter			Polypropylene (washable)		
Operation control			Control switch & wireless-remote controller		
Room temperature control			MC. Thermostat		
Vent control			Ventilate		
Air discharge louver			4 ways (up and down,right and left)		
Construction			Fixed chassis		
Drain system			Slinger-up system		
Protector			Dome mount protector (for compressor) Internal thermostat (for fan motor)	Heating overload protection (for compressor) Over current protection (far compressor) Internal thermostat (for fan motor)	
Power source cord			1.5m Cord (3 wires with grounding wire) with plug		
Standard accessories			Mounting kit, Wireless remote controller		

Note (1) The cooling capacity and operation data are measured at AHAM-cooling standard conditions:

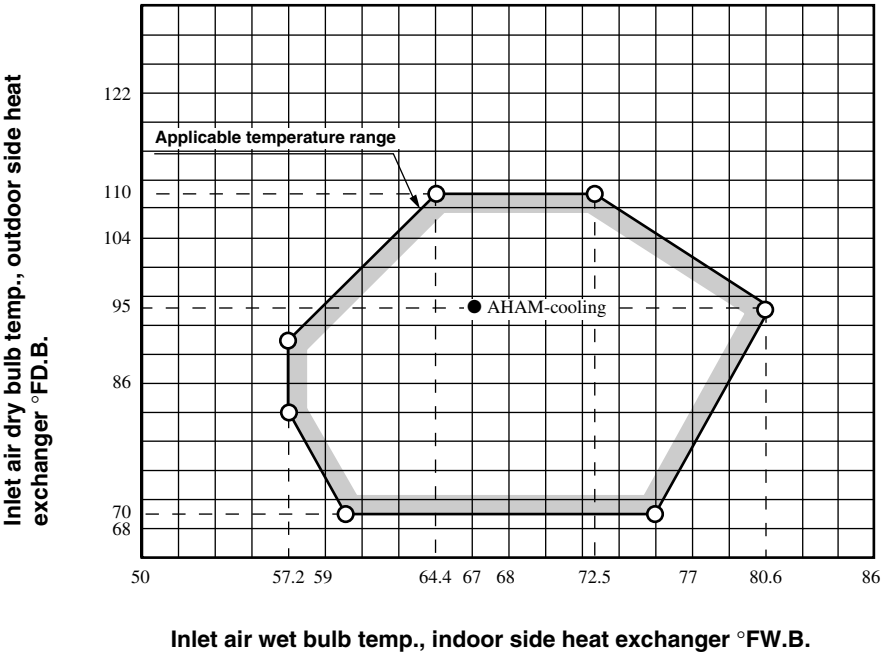
Inlet air temperature of indoor heat exchanger: 26.7°C DB, 19.4°C WB(80°FDB, 67°FWB)

Inlet air temperature of outdoor heat exchanger: 35.0°C DB, 23.9°C WB(95°FDB, 75°FWB)

8.2.2 Range of usage & limitations

(1) Coefficient of cooling capacity in relation to temp & Applicable temperature range for cooling operation.

This chart is the result of continuous operation under constant air temperature conditions, however, it excludes the initial pull-down stage.

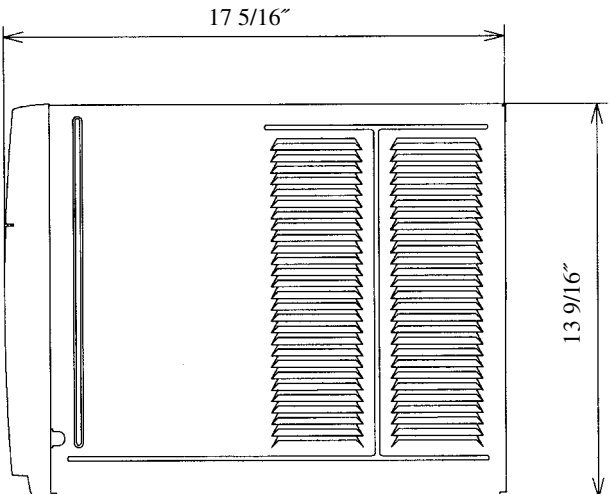
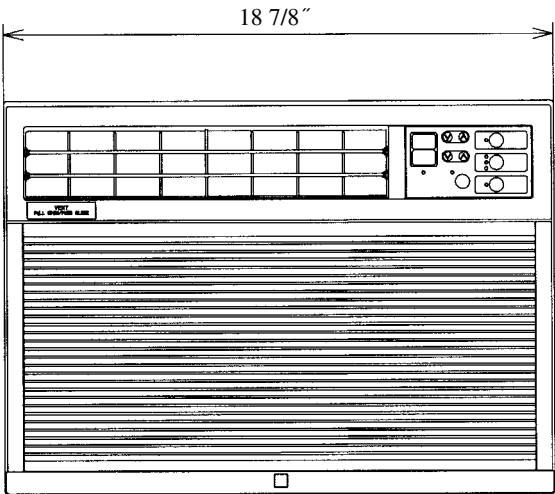


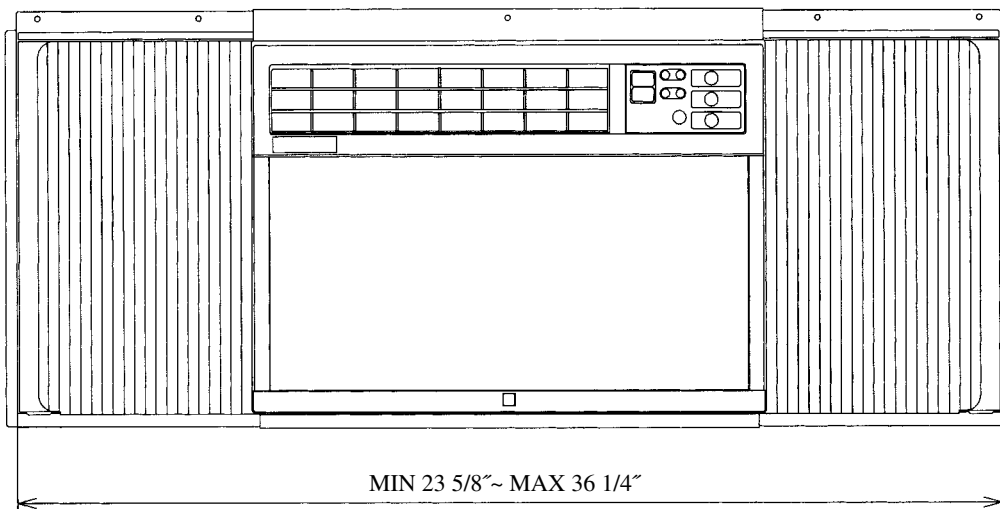
(2) Voltage application limitations

Models	Power source	Power source voltage		Voltage at starting
		Minimum	Maximum	
All models	1 Phase. 115V, 60Hz	104V	127V	Minimum 85% at Rating

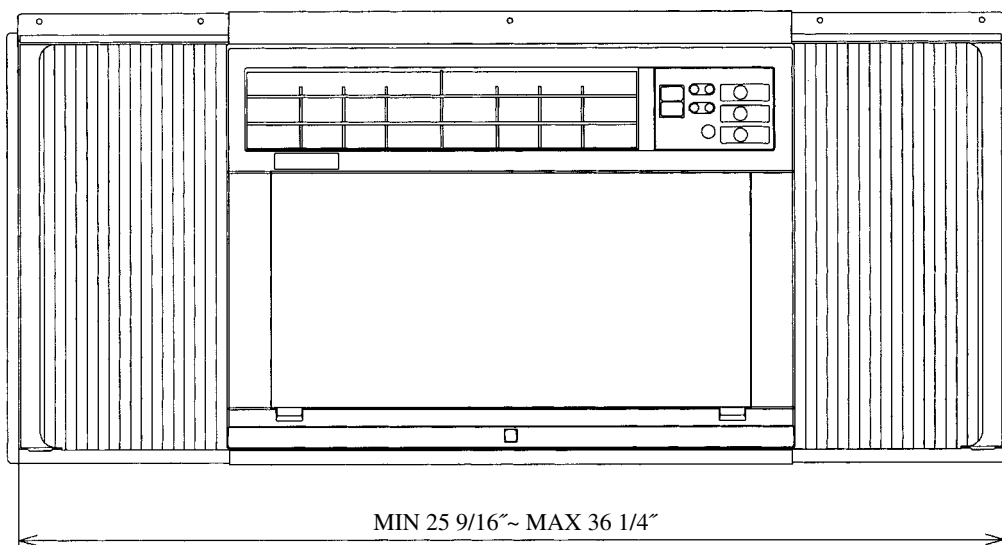
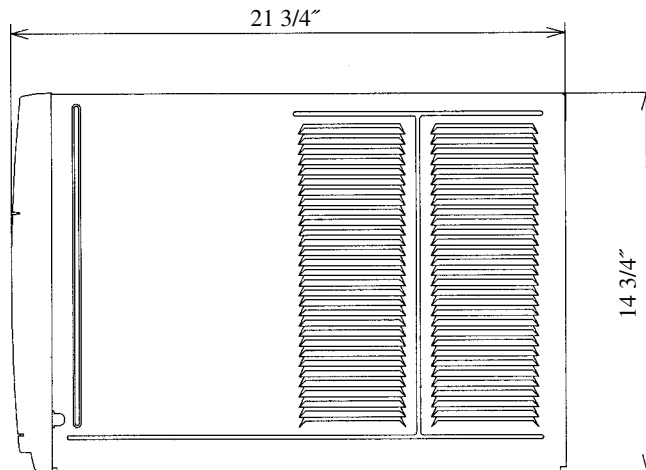
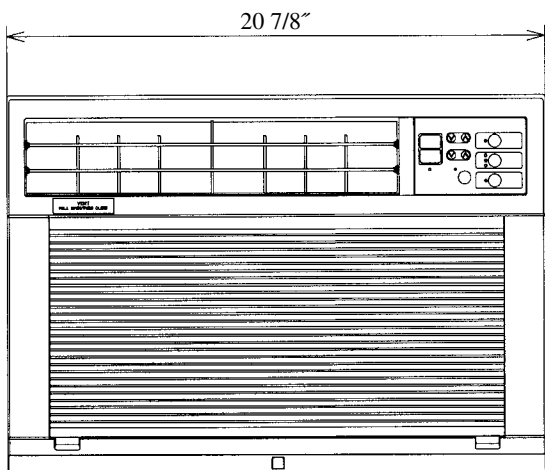
8.2.3 Exterior dimensions

Model WR50CEPU



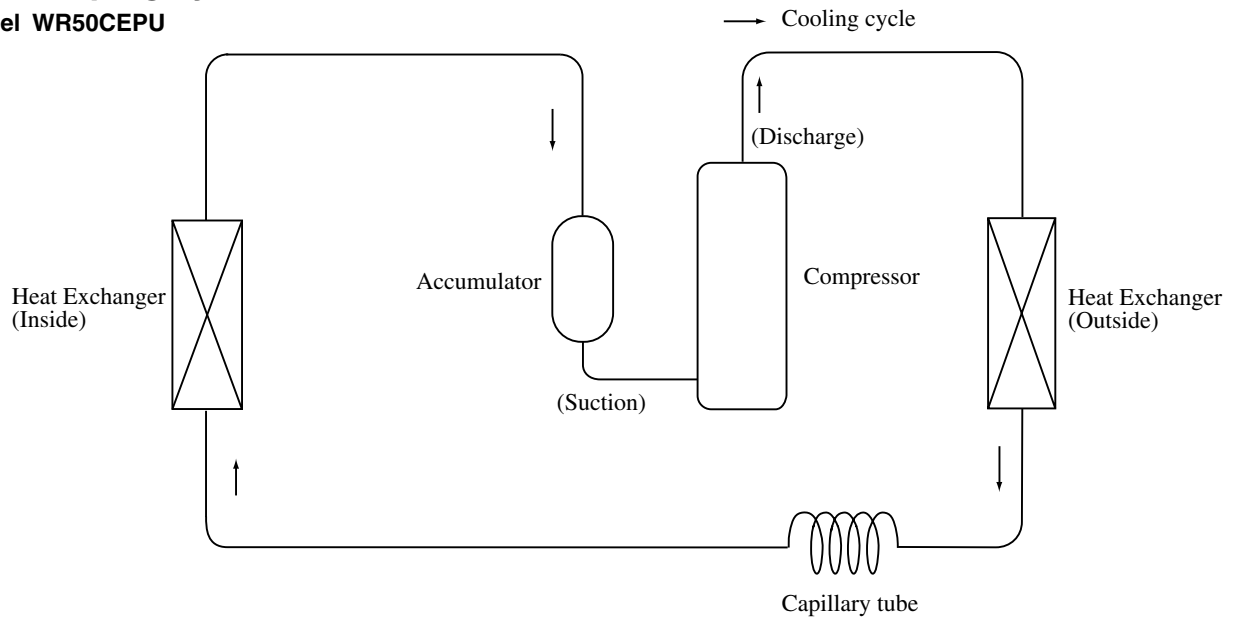


Models WR70CEPU, 90CEPU

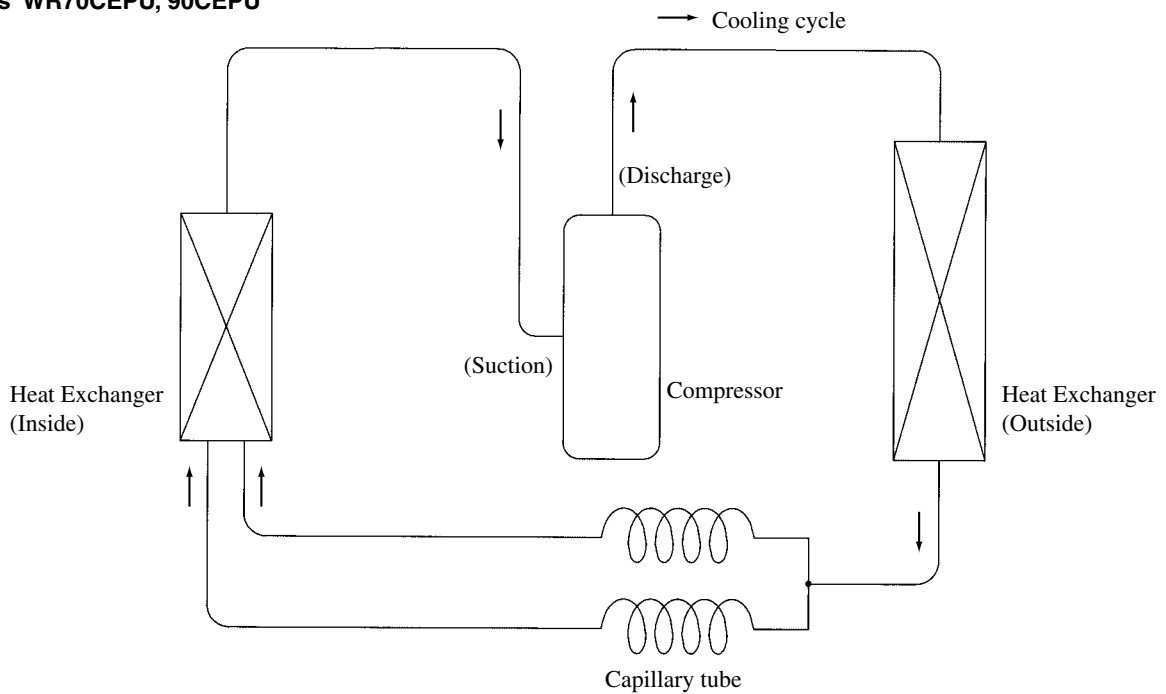


8.2.4 Piping system

Model WR50CEPU



Models WR70CEPU, 90CEPU



8.3 ELECTRICAL DATA

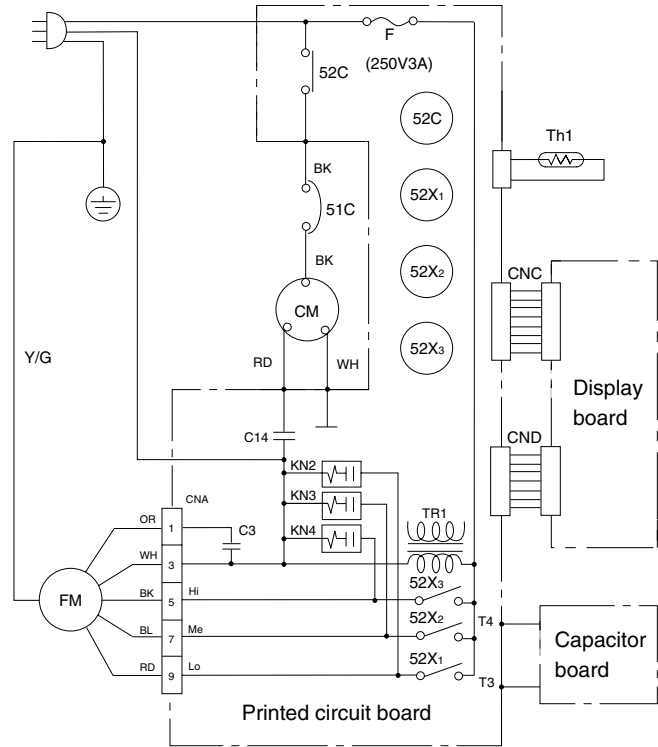
8.3.1 Electrical wiring

Meaning of marks

Symbol	Parts name	Symbol	Parts name
CM	Compressor motor	TR₁	Transformer
FM	Fan motor	C_{3,14}	Capacitor
51C	Over load protector (for CM)	KN_{2,3,4}	Noise killer
CT₁	Current sensor	52C	Magnetic contactor for CM
Th₁	Thermistor (Room temp.)	52X_{1,2,3}	Auxiliary relay
Th₂	Thermistor (Discharge pipe temp.)	F	Fuse

Model WR50CEPU

1 Phase 115V 60HZ

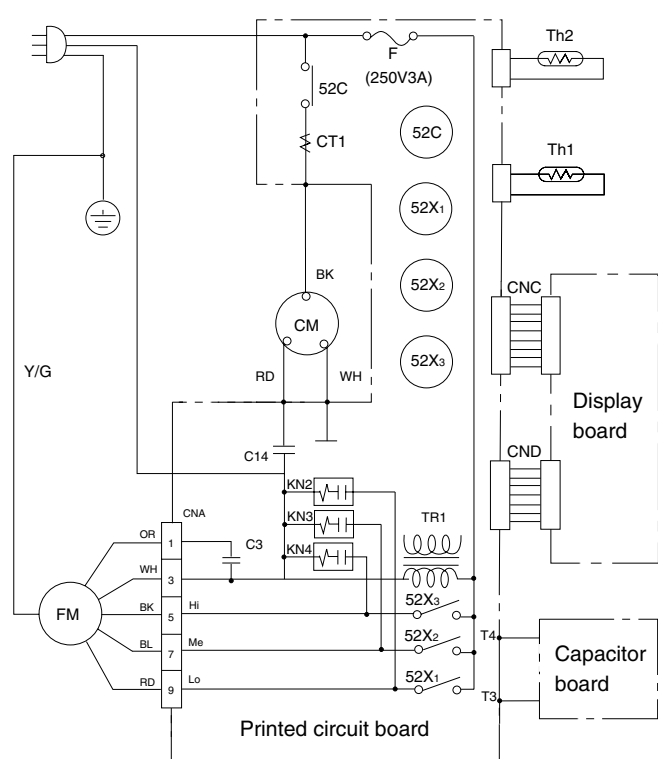


Color symbol

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
OR	Orange
Y/G	Yellow/Green

Models WR70CEPU, 90CEPU

1 Phase 115V 60HZ



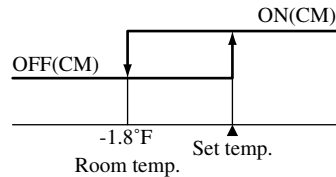
Color symbol

Mark	Color
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8.4 OUTLINE OF OPERATION CONTROL BY MICROCOMPUTER

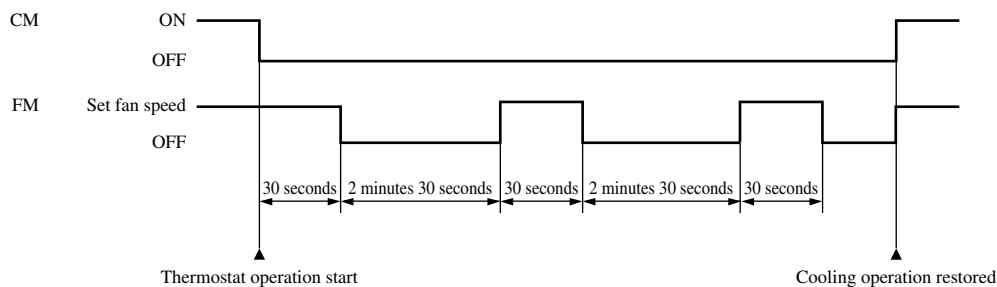
(1) Temperature adjustment

- (a) Temperature adjustment setting may be set between 64 and 86°F.
- (b) The compressor turned on and off as shown below according to the temperature setting.



(2) Energy Saver operation

If the "Energy Saver" button on the unit or the remote controller is pushed during cooling operation, the following fan control is performed during cooling thermostat operation.

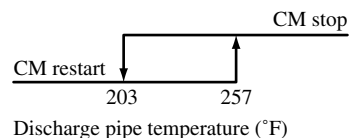


(3) Filter sign

- (a) After turning on the power supply, cumulative calculation of the fan motor operating time is performed. Once 120 hours have been reached, the filter lamp (red) comes on.
- (b) To extinguish the filter lamp and clear the cumulative operating time, stop the operation by using the controls on the unit or the remote controller and perform a power supply reset.

(4) Overheat protection for compressor (WR70CEPU, 90CEPU only)

- (a) If the discharge pipe temperature (detected by Th2) reaches 257°F, the compressor is stopped. If the discharge pipe temperature has reached 203 °F after a 3 minute delay, it is restarted.



- (b) If the operation is repeated within 1 hour, the compressor and fan motor are stopped. It will not start a third time. (All lamps will go out.)

(5) Condensation and icing prevention control

- (a) When all the following conditions are satisfied and 2 hours have passed, the fan is forced to Hi.
 - ① Set temperature : 68 °F or less.
 - ② Fan mode : Lo.
 - ③ Compressor : ON
- (b) This control is released when one of the following conditions are met and fan operation is done by control.
 - ① Set temperature is set at 69 °F or higher.
 - ② Fan mode is at setting other than Lo.
 - ③ Compressor is OFF.
 - ④ If this control has operated and 2 hours or more have passed.

(6) Current safe (WR70CEPU, 90CEPU only)

- (a) When the input current value (detected by current sensor) reaches the set value or more, the compressor is stopped.
- (b) While it will restart after a 3 minute delay, if the operation is performed again within 1 hour, the compressor and fan motor are stopped and it will not start a third time. (All lamps will go out.)

(7) Compressor start delay

If the compressor is stopped by a thermostat stop, cooling stop, OFF timer or other such means, it will not restart for 3 minutes.

(8) 3-minute forced operation

- (a) Thermostat operation is disabled for 3 minutes after the compressor has started to operate. The compressor continues to operate as is. After 3 minutes, thermostat operation is enabled.
- (b) Protection control has priority even during this operation.

8.5 APPLICATION DATA

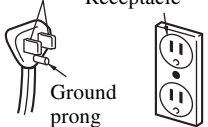

8.5.1 Electrical requirements

See the chart below for wiring and outlet information.

OBSERVE ALL LOCAL GOVERNING CODES AND ORDINANCES

Never remove the power supply cord ground prong.

For 115 volt models
with nameplate amps up
to and including 12.0

Plug and receptacle data	Receptacle voltage (60 hertz AC in all instances)	Name-plate amperes	Use time- delay fuse or circuit breaker Rating in amps	Minimum receptacle wire size	Type or branch circuit
Parallel blades  Ground prong Cat No. 34A5925	115	Up through 12.0	 15	14 gauge Use copper wire only	Single outlet only

- This unit requires a three-wire, single-phase, 60 hertz, AC only electrical supply.
- Receptacle wire must be at least as large as size shown on electrical chart.
- For your personal safety, this appliance must be grounded. This appliance has a power supply cord with a 3-prong grounding plug.

PROPER HOUSE WIRING

- Follow all of the enclosed instructions carefully for trouble-free performance and lowest operating costs.
- Use only time-delay fuse (or circuit breaker) for safe use and to help prevent needless blowing of fuses.
- Proper size of house wiring is needed for good voltage and to keep from overloading circuit. See data on reverse side. Avoid long lengths of housewiring that can cause the voltage to drop below the voltage shown on the nameplate.
- It is best that no other appliance or devices are on the same fused circuit to which this unit is connected. A blown fuse can result from wiring that is carrying more electrical current than it can safely handle.

DANGER: DO NOT USE AN EXTENSION CORD.

The power cord with the air conditioner is the best size for safe and efficient use of your air conditioner. Use of an extension cord may cause overheating, energy loss, and blown fuses or circuit breakers.

UNLESS THE PRODUCT IS GROUNDED PROPERLY, YOU ARE NOT PROTECTED AGAINST SEVERE OR LETHAL SHOCK IN THE EVENT OF A SHORT CIRCUIT OF AN ELECTRICAL PART OR THE WIRING OF THE AIR CONDITIONER.

The power cord extends from the right side of the unit. Refer to page 19 to extend the power cord from the left side of the unit.

8.5.2 Installation

INSTALLATION REQUIREMENTS

Your air conditioner will install into standard double hung windows with actual clear opening widths.

Lower sash must open sufficiently to allow a clear vertical opening. Side louvers and the rear of the air conditioner 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.

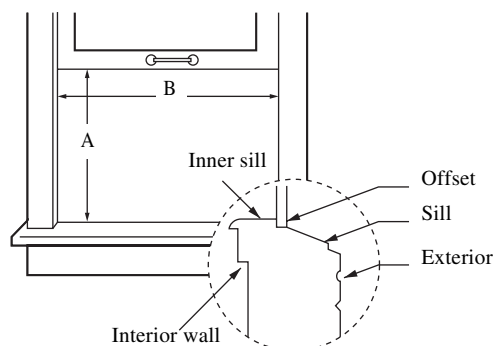


FIG. 1

Model	Window requirements (Clear opening area)	
	Vertical opening A	Opening width B
WR50CEPU	14-11/16 (min)	23-5/8 (min) – 36-1/4 (max)
WR70CEPU WR90CEPU	15-7/8 (min)	25-9/16 (min) – 36-1/4 (max)

ELECTRICAL SERVICE

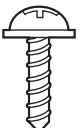
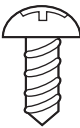

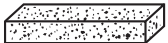
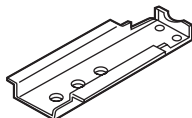
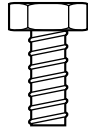

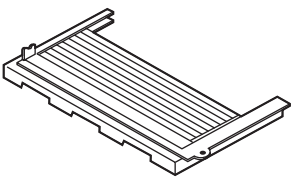
Check your available electrical service. The power supply available must be the same as that shown on the unit nameplate (found on right side of cabinet).

All models are equipped with a 3-prong service plug to provide proper service and safe positive grounding. Do not change plug in any way. Do not use an adapter plug. If your present wall outlet does not match your plug, call qualified electrician to make the necessary corrections. Save carton and this owner's manual for future reference. The carton is the best way to store unit during winter or when not in use.

REQUIRED TOOLS:

- Tight Fitting gloves
- Standard screwdriver
- Phillips screwdriver
- Pliers
- Sharp knife
- Carpenters level
- 3/8-inch open end wrench or adjustable wrench
- 1/4-inch hex socket and ratchet
- Tape measure
- Electric drill
- 1/4-inch drill bit

INSTALLATION HARDWARE

ITEM A: 7EA (1" Screw) 	ITEM B: 6EA (5/16" Screw) 
ITEM C: 1EA (Sash seal) 	ITEM D: 1EA (Sash seal) 
ITEM E: 1EA (Bracket) 	ITEM F: 1EA (Leveling bolt) 
ITEM G: 2EA (Locking nut) 	ITEM H: 2EA (Sliding panel) 

⚠ CAUTION

To avoid risk of personal injury, properly damage, or product damage due to the weight of this device and sharp edges that may be exposed:

- Air conditioners covered in this manual pose an excessive weight hazard. Two or more people are needed to move and install the unit.
To prevent injury or strain, use proper lifting and carrying techniques when moving unit.
- Carefully inspect location where air conditioner will be installed.
Be sure it will support the weight of the unit over an extended period of time.
- Handle air conditioner with care. Wear protective gloves whenever lifting or carrying the unit. Avoid the sharp metal fins of front and rear coils.
- Make sure air conditioner does not fall during installation.

HOW TO INSTALL

- 1** Insert the sliding panels (ITEM H) into the guides of the air conditioner. Fasten the curtains to the unit with screws (ITEM B), as shown in FIG. 2.

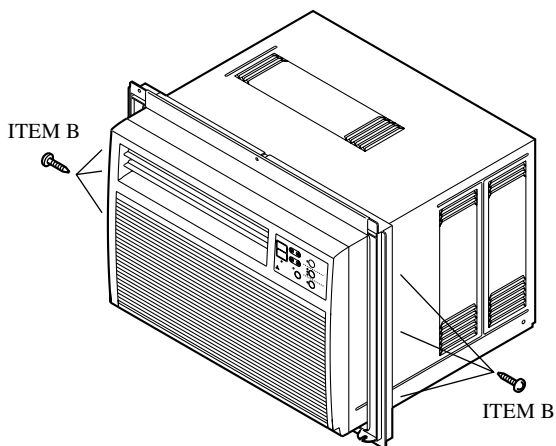


FIG. 2

LOCATION OF UNIT IN WINDOW

- Open the window and mark center line on the center of the inner sill as shown in FIG. 3.

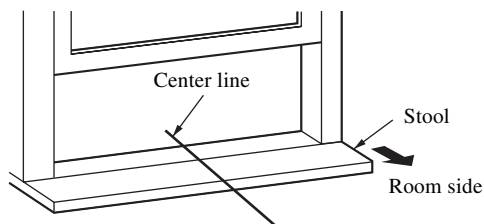


FIG. 3

ATTACH BRACKET

- Mount the bracket used to fasten the center of the unit in the center of the window frame. Place the bracket on the outdoor side of the unit and fasten it first with one screw (ITEM A), then align it with the height of the unit base and fasten the nut.
- Bracket helps to hold unit securely in place. Be sure to place bracket edge flush against back of inner sill. See FIG. 4.

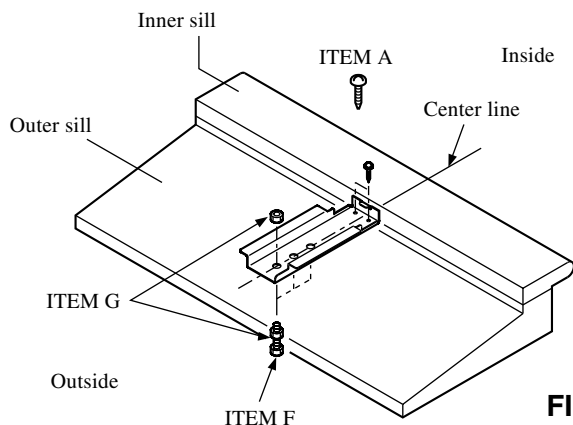
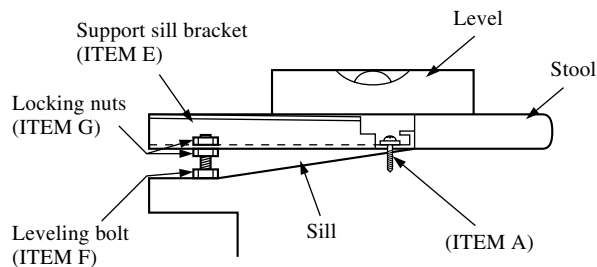


FIG. 4



- Readjust the leveling bolt as needed to adjust height of the outside end of the support sill bracket to the stool height, as shown in FIG. 6. Using a bubble-level, the air conditioner should be slightly (1/2 bubble) lower at rear of the air conditioner so that it will drain properly. Then tighten lock nuts with wrench or pliers.

INSTALL THE AIR CONDITIONER IN THE WINDOW

- Carefully lift the air conditioner and slide it into the open window. Make sure the bottom guide of the air conditioner drops into the bracket.
- When the air conditioner drops into the bracket, the air conditioner will be centered in window opening as shown in FIG. 5.
- Cut the Sash seal (ITEM C) to the window width and set shown in FIG. 6.
- While steadying the air conditioner, carefully bring the window sash down behind the upper guide of the air conditioner, as shown in FIG. 6.

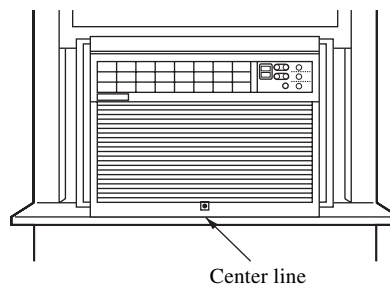


FIG. 5

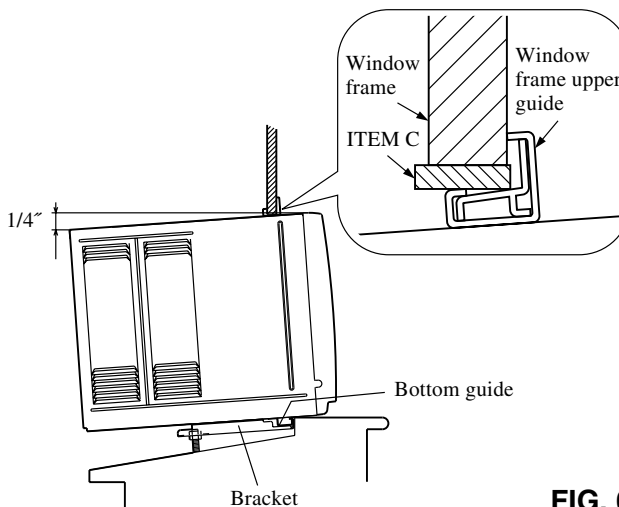


FIG. 6

2 SECURE THE SLIDING PANELS

Extend the sliding panels to fill the window opening using 5 screws (ITEM A) to secure them, as shown in FIG. 7.

3 INSTALL THE SASH SEAL

- Cut the sash seal to the window width. Stuff the sash seal between the glass and the window to prevent air and insects from getting into the room, as shown in FIG. 7.
- Screw the sash lock (ITEM D) on using an ITEM B screw, as shown in FIG. 7.

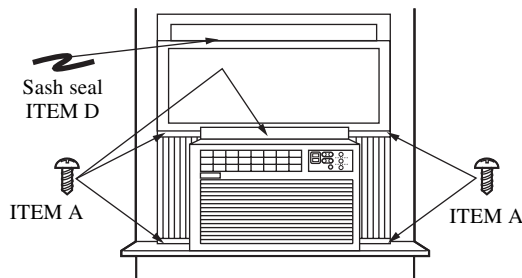


FIG. 7

IF AIR CONDITIONER IS BLOCKED BY STORM WINDOW FRAME

- If storm window presents interference, fasten a 2" wide wood strip to inner window sill across the full width of the sill. Wood strip should be thick enough to raise the height of the window sill so that the unit can be installed without interference by the storm window frame. See FIG. 8. Top of wood strip should be approximately 3/4" higher than storm window frame or wood strip (outdoors) to help unit condensation to drain properly to the outside.
- Install a second wood strip (approximately 6" long 1" wide and same thickness as first strip) in the center of the outer sill flush against the back of the inner sill. This will raise the bracket as shown in FIG. 8.
- If the distance between "Storm window frame" and "Wood strip mounted on top of inner sill" is more than 1", two wood strips are not necessary.

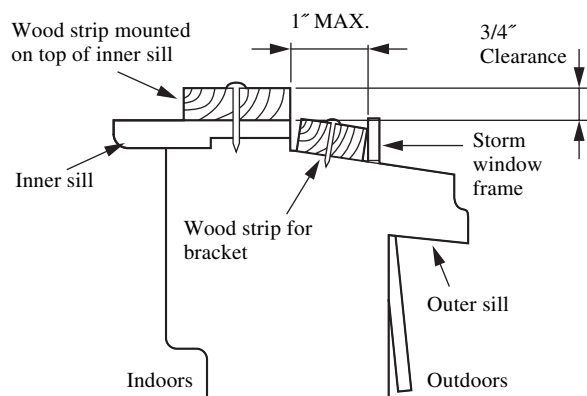


FIG. 8

AIR CONDITIONER REMOVAL

Turn the air conditioner off, disconnect the power cord, remove the sash lock and the screws installed through the top and bottom of the sliding panels. Save all parts for later reinstallation. Close the sliding panels. Keeping a firm grip on the air conditioner, raise the sash, and carefully tilt the air conditioner backward, draining any condensed water. Lift the air conditioner from the window. Remove the sash seal from between the windows.

⚠ CAUTION

- Air conditioners covered in this manual pose an excessive weight hazard. Two or more people are needed to move and install the unit.
To prevent injury or strain, use proper lifting and carrying techniques when moving unit.
- When handling the air conditioner, be careful to avoid cuts from sharp metal fins on front and rear coils.
- Make sure air conditioner does not fall during removal.

8.5.3 Operation

INSTALLATION

Pick a location which will allow you to blow the cold air into the area you want. Windows used for installation must be strong enough to support the weight of the air conditioner. Good installation with special attention to the proper position of the unit will lessen the chance that service will be needed.

When cooling more than one room, installation is very important since cold air will not turn corners. To cool your rooms, cold air must be blown from the air conditioner in a straight path.

HOW AND WHY

Your room air conditioner provides the following functions to make hot weather living more comfortable:

- Cools and circulates room air.
- Lowers humidity by removing excess moisture.
- Filters out summertime dust, dirt, and some airborne impurities.

The air conditioner performs these functions by drawing room air through a filter which traps dust and dirt particles. The air then passes over a cooling coil which refrigerates the air and removes excess moisture. The same air is then returned to the room-cooler, drier, and cleaner. Moisture removed from the room air is carried to the outside and evaporated.

Your air conditioner is designed to be easy to operate and to provide plenty of cooling power.

NORMAL SOUNDS

Aside from the regular fan motor and compressor sounds coming from your air conditioner, you will once in a while hear a pinging sound. This is the result of moisture being picked up from the air in the room and thrown against the air conditioner's fan.

This is normal and should not be cause for concern. Also, do not be alarmed if you hear a slight hissing or gurgling sound coming from your air conditioner after it is off. These are normal coolant noises.

Compressor

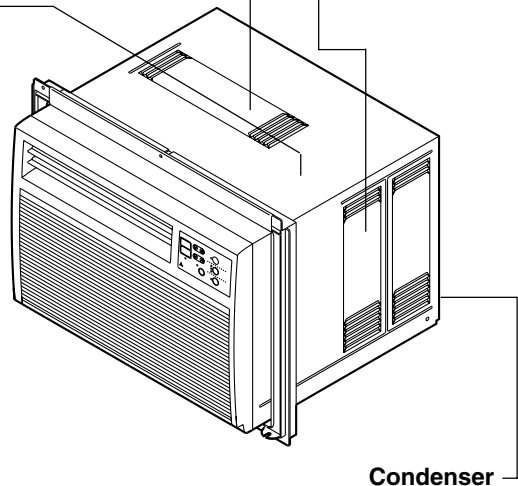
The modern high efficiency compressor may have a high pitched hum or pulsating noise that cycles on and off.

Fan

You may hear air movement from the fan.

Unit vibration

The unit may vibrate and make noise because of poor wall or window construction.



Condenser

You may hear droplets of water hitting the condenser, causing a pinging or clicking sound.

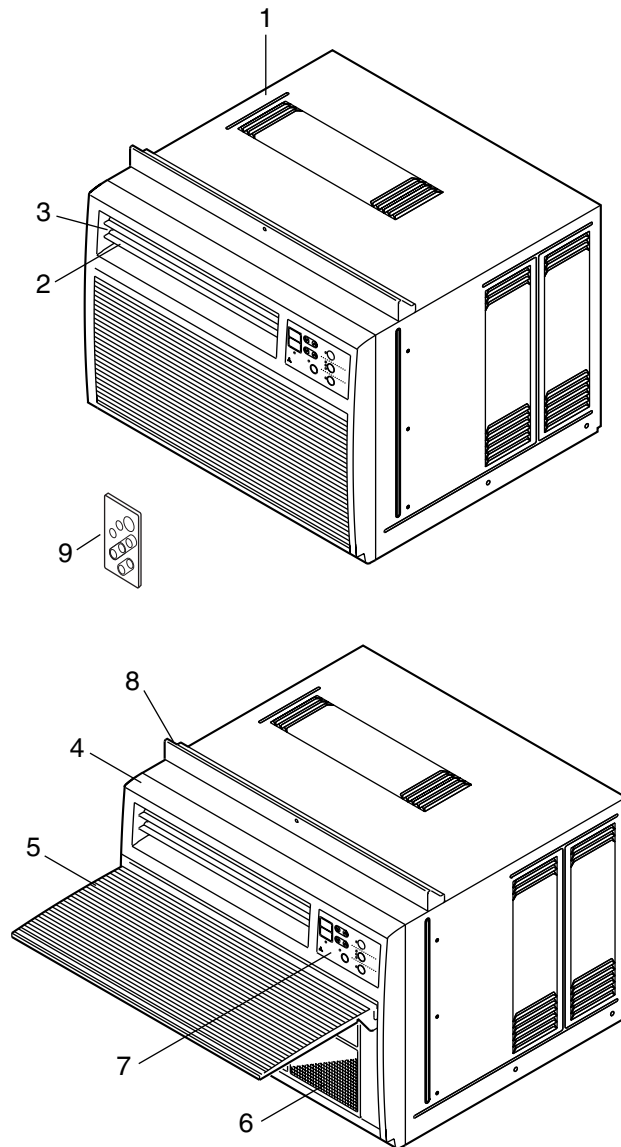
CAPACITY AND RUNNING TIME

Proper unit size is important in deciding the desired comfort for the area you want to cool. The proper size is determined by the number of square feet in the area to be cooled, indoor and outdoor temperature and humidity.

Whenever the heat or humidity load is above normal the air conditioner must run longer and more often to keep the desired temperature you have selected. Under heavy heat load conditions the air conditioner may need to run constantly to keep the temperature you want.

At times using the HIGH FAN setting to circulate the room air may make it comfortable even though the air is not being cooled. This will decrease your cost of use.

FEATURES



1. Cabinet
2. Cooling air discharge
3. Louver (H)
4. Front panel
5. Inlet grille
6. Air filter
7. Display panel
8. Frame
9. Remote controller

USING THE AIR CONDITIONER

⚠ WARNING

To reduce the risk of fire, electric shock, or injury to persons, read the important safety instructions section before operating this appliance.

To begin operating the air conditioner after installation, follow these steps:

1. Plug in the air conditioner. (To prevent electrical hazards, do not use an extension cord or an adapter plug.)
2. Set the TEMP control to the coolest setting.
3. Set the FAN MODE control at the highest COOL level.
4. Adjust the louvers for comfortable air flow.
5. Once the room has cooled, adjust the TEMP control to the setting you find most comfortable.

Note: If the air conditioner is turned off, wait 3 minutes before restarting. This allows pressure inside the compressor to equalize. Failure to wait 3 minutes before restarting may cause inefficient operation.

Review the air conditioner features section for other settings.

DISPLAY

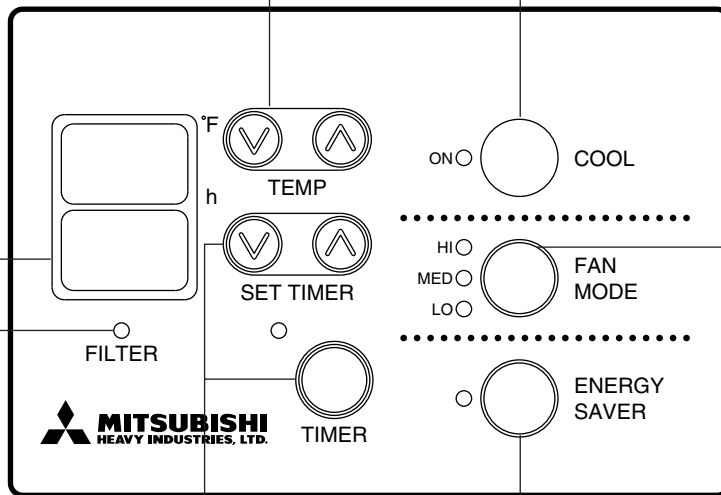
REMOTE CONTROLLER SIGNAL RECEIVER

TEMPERATURE SETTING

- This button can automatically control the temperature of the room. The temperature can be set within a range of 64°F to 86°F by 1°F. Select the lower number for lower temperature of the room.

COOL

- Pressing the button starts the cooling operation. Pressing it once more stops operation.



FAN MODE

- If the FAN MODE button is pressed during cooling, the unit will switch to the FAN MODE. (LO → ME → HI → LO → ...)
- If the FAN MODE button is pressed while cooling is off, fan operation starts. Each time the FAN MODE button is pressed, the FAN MODE changes as follows: LO → ME → HI → OFF → LO → ...

ENERGY SAVER

The fan stops when the compressor stops cooling.

- Approximately every 3 minutes the fan will turn on and check the room air to determine if cooling is needed.

TIMER

- When the TIMER button is pressed, if the air conditioner is running, it is not running on the Off timer (stopping operation), it runs on the On timer (starting operation). At this time, the set time displays 1 hour. Using the SET TIMER ^ and v buttons, set the time as shown below. 1 Hour ÷ 2 Hours ÷ ... ÷ 11 Hours ÷ 12 Hours
- To change the set temperature in the display, use the TEMP ^ and v buttons. After this change, the display will change back to the timer display.

FILTER INDICATOR WILL LIGHT

Filter indicator will automatically light when it is time to clean the filter.

- When the fan motor has run for a cumulative total of more than 120 hours, the filter indicator will light up.
- If the filter indicator lights up, press the COOL button if the unit is in the cooling mode and if it is in the fan mode, press the FAN MODE button and stop operation.

After operation has stopped, the filter indicator will go off and the cumulative time will be reset.

Note(1) If the unit is unplugged before the filter indicator comes on, the internal device counting the hours of use will be interrupted and will reset to zero. It is recommended that the filter be cleaned at the end of the cleaning season in the count 120 hours of use has been reached.

REMOTE CONTROLLER

Precaution: The Remote Controller will not operate properly if strong light strikes the sensor window of the air conditioner or if there are obstacles between the Remote Controller and the air conditioner.

COOL

- Pressing the button starts the cooling operation. Pressing it once more stops operation.

ENERGY SAVER

The fan stops when the compressor stops cooling.

- Approximately every 3 minutes the fan will turn on and check the room air to determine if cooling is needed.

FAN MODE

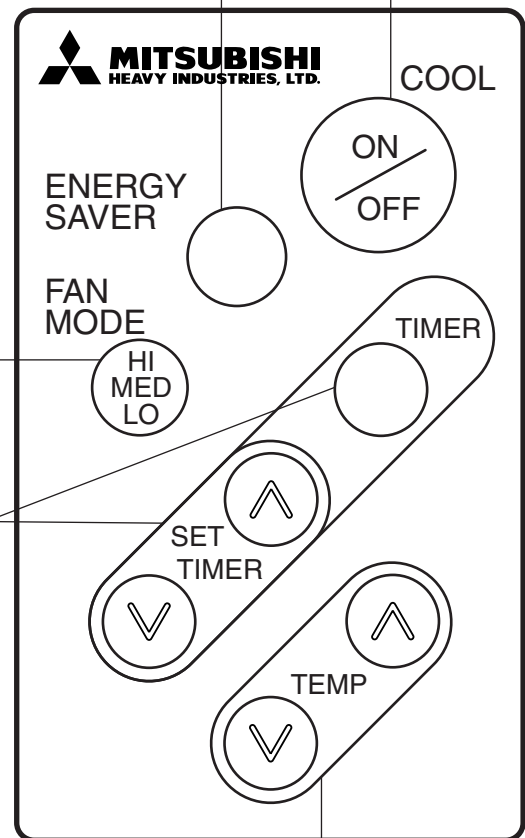
- If the FAN MODE button is pressed during cooling, the unit will switch to the FAN MODE.
(LO → ME → HI → LO → ...)
- If the FAN MODE button is pressed while cooling is off, fan operation starts. Each time the FAN MODE button is pressed, the FAN MODE changes as follows: LO → ME → HI → OFF → LO → ...

TIMER

- When the TIMER button is pressed, if the air conditioner is running, if it is not running on the Off timer (stopping operation), it runs on the On timer (starting operation).
At this time, the set time displays 1 hour. Using the SET TIMER ^ and v buttons, set the time as shown below.
1 Hour ÷ 2 Hours ÷ ... ÷ 11 Hours ÷ 12 Hours
- To change the set temperature in the display, use the TEMP ^ and v buttons. After this change, the display will change back to the timer display.

TEMPERATURE SETTING

- This button can automatically control the temperature of the room. The temperature can be set within a range of 60°F to 86°F by 1°F. Select the lower number for lower temperature of the room.



HOW TO INSERT BATTERIES

1 REMOVE THE BUTTON BATTERY HOLDER

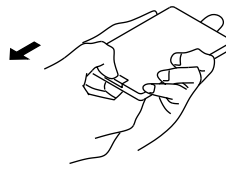
- Pull the button battery holder on the back of the remote control unit out toward you to remove it.

2 INSERT TWO BATTERIES

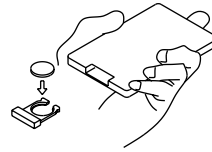
- Be sure that the (+) and (-) directions are correct.
- Be sure that both batteries are new.

3 REATTACH THE BUTTON BATTERY HOLDER

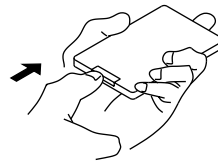
- Slide it back into position.



- Do not use rechargeable batteries. Such batteries differ from standard dry cells in shape, dimensions, and performance.



- Remove the batteries from the remote controller if the air conditioner is not going to be used for an extended length of time.



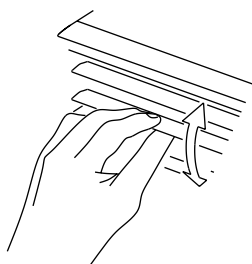
- Take care not to splash water or other liquids on the remote control unit.
- Since it can result in batteries being swallowed, keep the remote control unit in a place which is out of reach or babies and infants.

AIR DIRECTION ADJUSTMENT

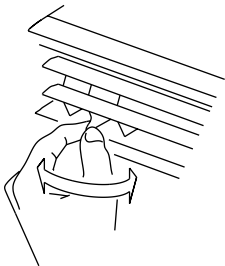
Using the Control Tabs, the air flow can be directed to the left, right, up down, straight ahead, or any combination of these directions.

The direction of the air flow blown from the unit can be changed by changing the angle of the vertical and horizontal louvers.

- When changing the louver direction, be sure to stop the unit's operation.



UP • DOWN

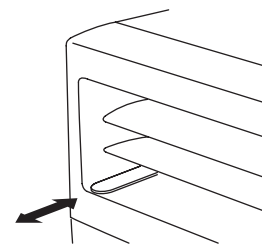


RIGHT • LEFT

VENT CONTROL

The Vent Control allows the air conditioner to either recirculate inside air (CLOSE) or exhaust air to the outside (OPEN).

- The CLOSE position is used when maximum cooling is desired. It may also be used for air recirculation without cooling when the air conditioner is set in the FAN position.
- The OPEN position removes stale air from the room and exhausts it to the outside. Fresh air is drawn into the room through normal air passages found in homes.
- The OPEN or CLOSE position can be used with any fan selection.



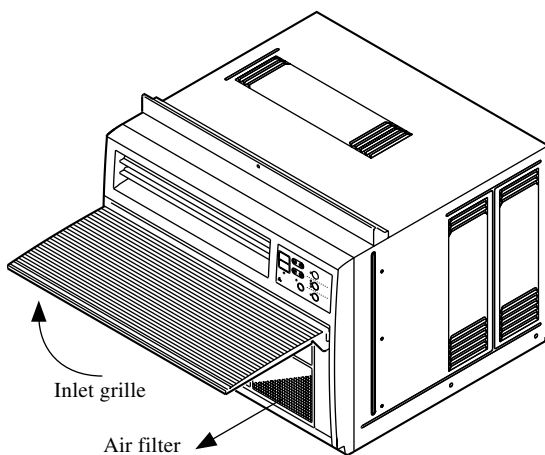
PULL OPEN/PUSH CLOSE

8.5.4 Maintenance

AIR FILTER CLEANING

The air filter will become dirty as it removes dust from the inside air. It should be washed at least every 2 weeks. If the air filter remains full of dust, the air flow will decrease and the cooling capacity will be reduced, possibly damaging the unit.

- Pull the inlet grille forward and pull out the air filter.
- Wash the air filter in warm water. Be sure to shake off all the water before replacing the filter.
- Never operate the unit without installing the filter. It may result in serious damage to the unit.

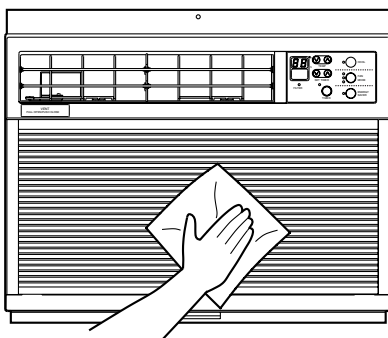


AIR CONDITIONER CLEANING

Clean the front grille and inlet grille by wiping with a cloth dampened in a mild detergent solution.

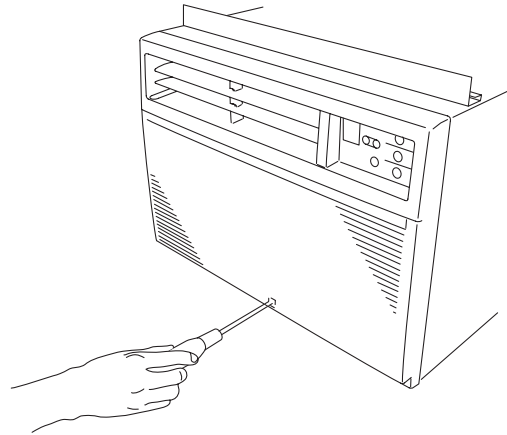
The cabinet may be washed with mild soap or detergent and lukewarm water, then polished with liquid appliance wax.

To ensure continued peak efficiency, the condenser coils (weather side at unit) should be checked periodically and cleaned if they become clogged with soot or dirt from the atmosphere. Brush or vacuum exterior coils to remove debris from fins.

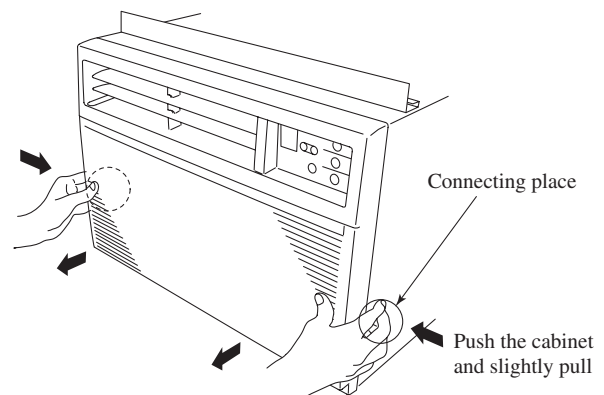


HOW TO REMOVE THE FRONT PANEL

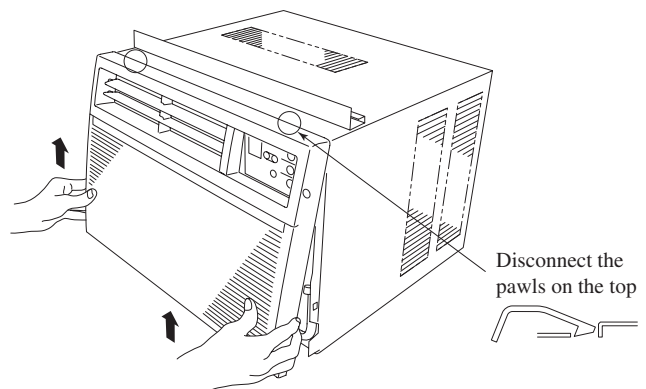
- ① Remove the screw on the bottom center of the front panel.



- ② Grasp the front panel as shown in the drawing, push on both sides to release the tabs and then carefully remove the front panel to the front.



- ③ While in the condition shown in ②, slide the front panel upward and disconnect the tabs on the top.



HOW TO ROUTE THE POWER SUPPLY CORD TO THE LEFT SIDE

- ① Remove the front panel (refer to the how to remove the front panel).
- ② Route the power cord as shown FIGURE1.

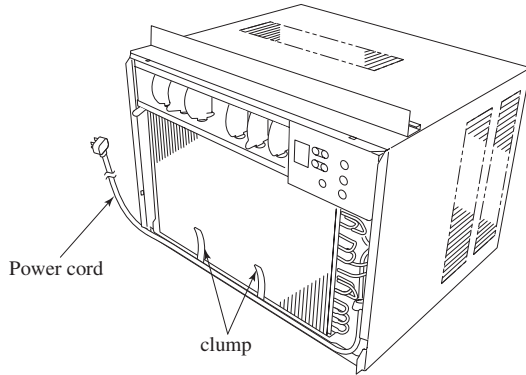


FIGURE1

- ③ Clamp the power cord as shown FIGURE2.

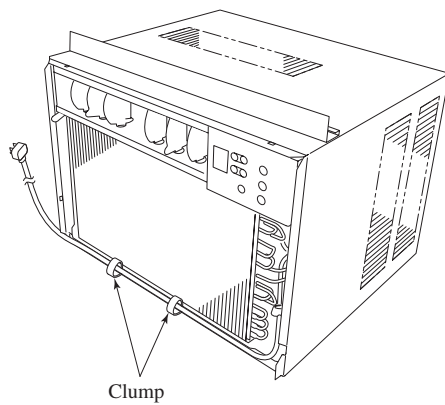


FIGURE2

- ④ Hang the pawls on the top (the parts where the front panel catches on the cabinet) FIGURE 3.
- ⑤ Placing the front panel, Check the vent lever not to shut up as shown FIGURE 3.

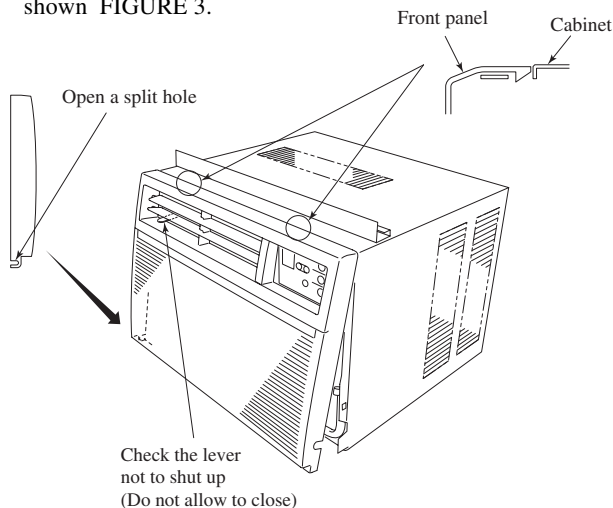


FIGURE3

- ⑥ Push the front panel to the cabinet to connect the pawls on the side (where the front panel catches on the cabinet) FIGURE 4.
- ⑦ Secure the front panel to the unit using the screws provided FIGURE 4.

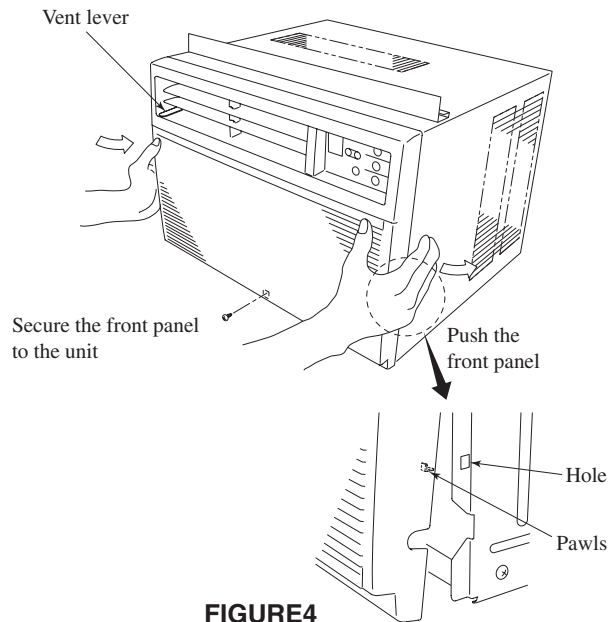


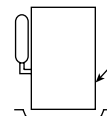
FIGURE4

STANDARD OPERATION DATA

Model		WR50CEPU	WR70CEPU	WR90CEPU
Item				
Discharge pipe temp.	°F	145	173	170
Suction pipe temp.		53.2	72	60.3
Compressor temp. ※1		137	123	109
High pressure ※2	psig	266	249	267
Low pressure ※2		85.9	88.7	82.9
Fan revolution speed	rpm	924	1024	1000

Note(1) The values shown above were attained from tests using AHAM standard conditions.
(Indoor: 80°F DB/67°F WB, Outdoor: 95°F DB / 75°F WB)

*1 Compressor surface temperature.



Surface temperature of suction pipe is opposite side

*2 Reference value: (Since there is no check joint, it cannot be monitored.)

8.6 TROUBLE SHOOTING

BEFORE CALLING FOR SERVICE

Check the following list to be sure a service call is really necessary. A quick reference to this manual may help you avoid an unneeded service call.

THE AIR CONDITIONER WILL NOT OPERATE.

Check if ...

Then ...

Wall plug disconnected.	Push plug firmly into wall outlet.
House fuse blown or circuit breaker tripped.	Replace fuse with time delay type or reset circuit breaker.
Power is OFF.	Push the COOL button.
Unit was turned off by pushing TEMP control to a higher number and then immediately turned back to a lower number.	Wait approximately 3 minutes. Listen for compressor to start.
Unit was turned off and then on too quickly.	Turn unit off and wait 3 minutes before restarting.
TEMP control set warmer than room temperature.	Turn TEMP control to a lower number.

AIR FROM UNIT DOES NOT FEEL COLD ENOUGH.

Check if ...

Then ...

FAN SPEED set a LOW.	Push FAN MODE button to set a ME or a HI.
TEMP control set too higher number.	Turn TEMP control to a lower number.
Room temperature below 64°F (18°C).	Cooling may not occur until room temperature rises above 64°F (18°C).
Temperature sensing tube touching cold coil, located behind air filter.	Straighten tube away from coil.

THE AIR CONDITIONER COOLING, BUT ROOM IS TOO WARM – ICE FORMING ON COOLING COIL BEHIND DECORATIVE FRONT.

Check if ...

Then ...

Outdoor temperature below 64°F (18°C).	To defrost the coil, set mode to FAN.
Air filter may be dirty.	Clean air filter. Refer to maintenance section of owner's manual.
TEMP control set too lower for night-time cooling.	To defrost the coil, set the mode to FAN or "High Cool" or "Medium Cool" with the TEMP control to a higher number.

THE AIR CONDITIONER COOLING, BUT ROOM IS TOO WARM – NO ICE FORMING ON COOLING COIL BEHIND DECORATIVE FRONT.

Check if ...

Then ...

Dirty air filter – air restricted.	Clean air filter. Refer to maintenance section of owner's manual.
TEMP control set too higher number.	Turn TEMP control to a lower number.
Front of unit is blocked by drapes, blinds, furniture, etc. Air distribution is restricted.	Clear blockage in front of unit.
Doors, windows, registers, etc. open. Cold air escapes.	Close doors, windows, registers, etc.
Unit recently turned on in hot room.	Allow additional time to remove stored heat from walls, ceiling, floor, and furniture.

THE AIR CONDITIONER TURNS ON AND OFF RAPIDLY.

Check if ...

Then ...

Outside temperature is extremely hot.	Set FAN MODE on HI or ME to bring air past cooling coils more frequently.
---------------------------------------	---

NOISE WHEN UNIT IS COOLING.

Check if ...

Then ...

Sound of fan hitting water – moisture removal system.	This is normal when humidity is high. Close door, windows, and registers.
Window vibration – poor installation.	Refer to installation instructions or check with installer.

WATER DRIPPING INSIDE WHEN UNIT IS COOLING.

Check if ...

Then ...

The air conditioner is improperly installed.	Tilt air conditioner slightly to the outside to allow water drainage. Refer to installation instructions or check with installer.
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WATER DRIPPING OUTSIDE WHEN UNIT IS COOLING.

Check if ...

Then ...

The unit is removing large quantities of moisture from humid room.	This is normal during excessively humid days.
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