

FUJITSU

#284

ROOM AIR CONDITIONER INSTALLATION MANUAL

AKT
AFT SERIES
ALT
AXT

P/N 9385176027

Read through this manual before commencing installation.

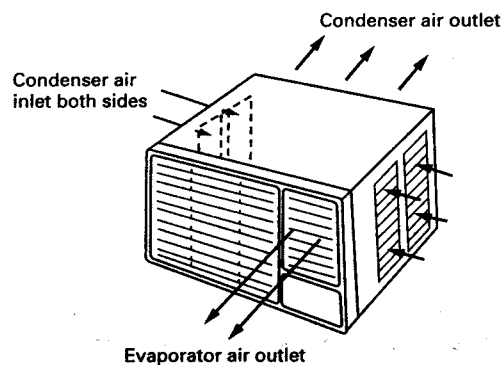
1. Power supply

Connect the air conditioner to a 240V-50Hz private supply lined with a time delay fuse having values specified on the rating plate. "Wired in" electrical installation are subject to SAA Wiring Rules, as determined by the Energy Authority.

Note: When ALT22R is used in the area having the outdoor temperature above 45°C, reconstruct the set so that a 20A connector can be used and install it to the set at a qualified service shop.

2. Installation location

- (1) Select a place where cool air emitted from the Air Conditioner circulates evenly, reaching every part of the room. Make sure that no obstacles both inside and outside the room prevent the air flow.



- (2) Where practicable, locate the air conditioner with the lower edge of the cabinet approximately 0.75 m. (29.5") to 1.5 m. (59") from the floor. This usually gives the optimum air circulation pattern within the room for cooling and heating.

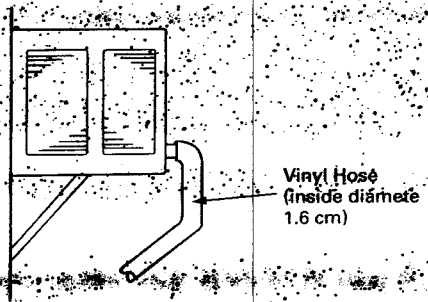
(8) Refit the front panel.

(9) Drainage works

a) AKT 7

AKT 9

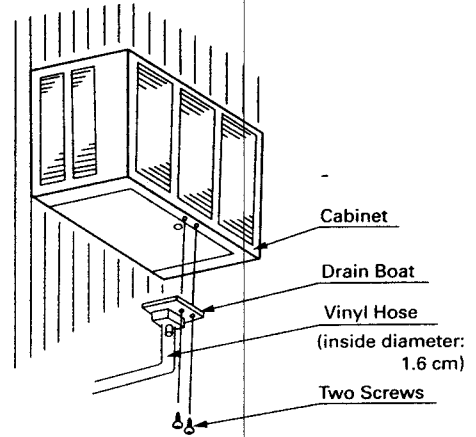
Connect a vinyl hose or a substitute to the drain tube for water drainage.
(Hose inside diameter: 1.6 cm)



b) AFT
ALT
AXT
AKT7R
AKT9R } series

Fix an attached drain boat to the bottom of cabinet and connect a sort vinyl hose to it for water drainage.
(Hose inside diameter: 1.6 cm)

Note: If the drainage work is abnormal (a broken pipe, an extremely long horizontal pipe, an unstraight pipe, for instance), the water may overflow the piping.



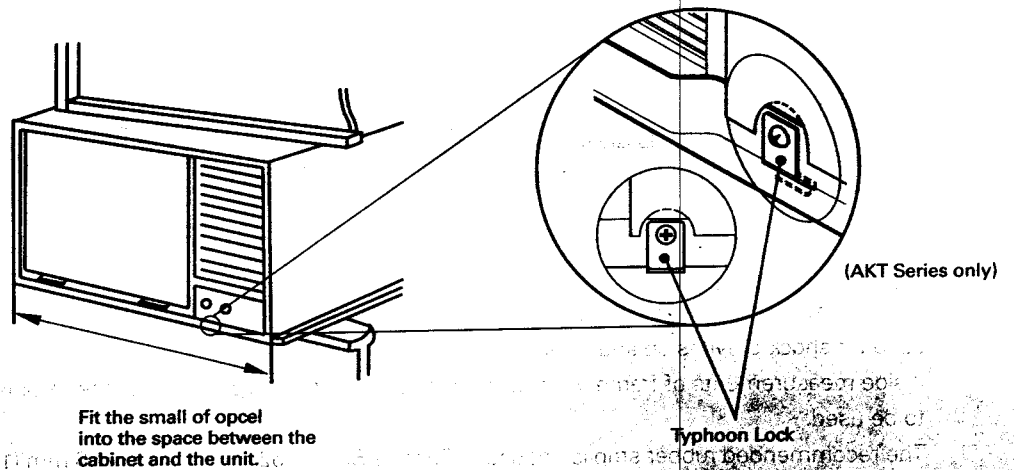
CABINET DIMENSIONS

Series	Width	Height	Length
AKT	457 mm (18")	349 mm (13-3/4")	581 mm (23")
AFT	660 mm (26")	400 mm (15-7/8")	597 mm (23-1/2")
ALT	710 mm (27-15/16")	428 mm (16-7/8")	842 mm (33-5/32")
AAT	670 mm (26-3/8")	455 mm (17-11/16")	657 mm (25-7/8")

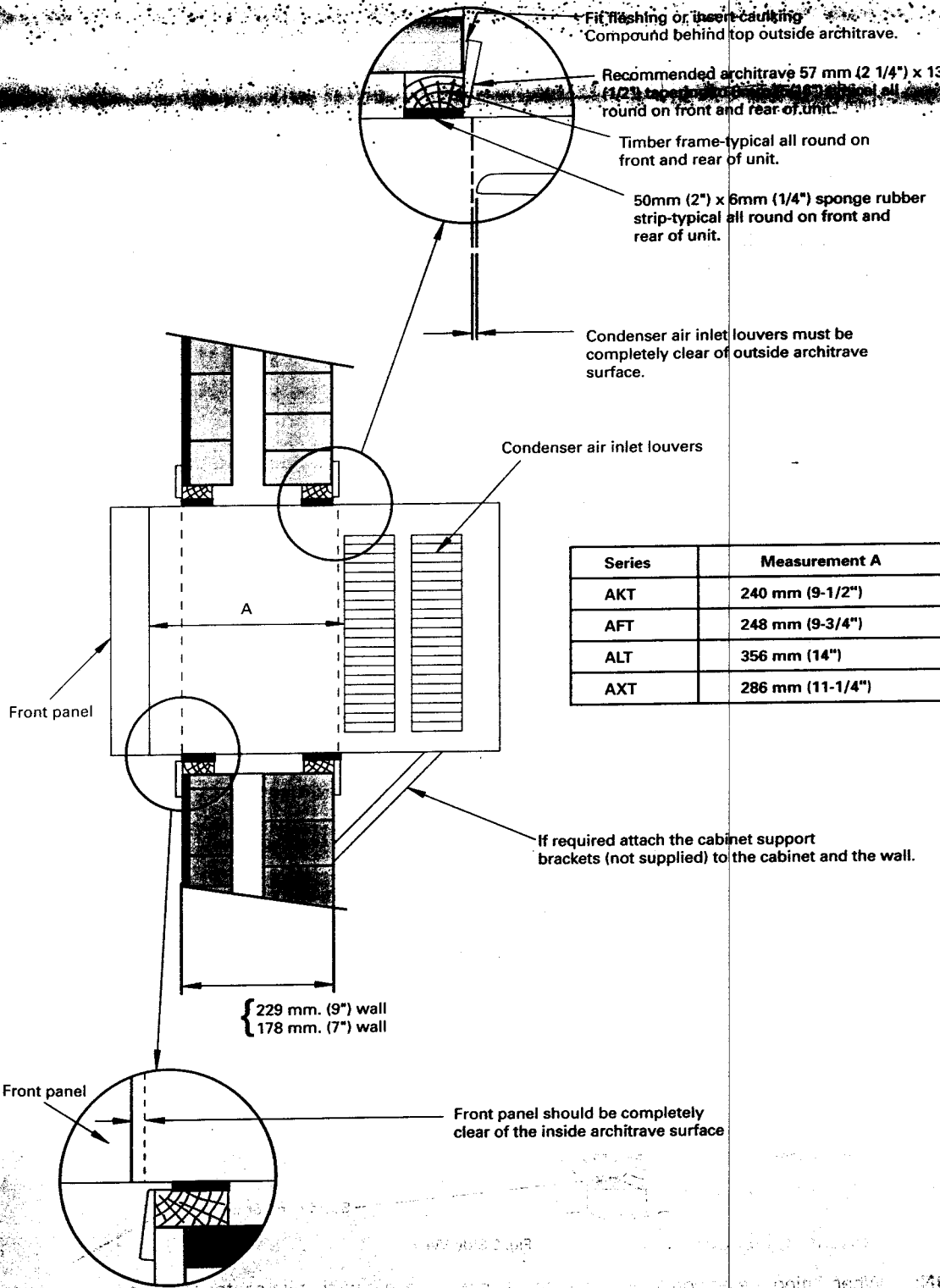
Note: When constructing a timber frame, arrange so that the outside rear of the air conditioner is between 0.5 ~ 1 cm lower than the front of the unit. This allows condensed water to drain off outside the room. If the inside of the air conditioner is lower, condensed water and rain may flow into the room.

5. Installation Process

- (1) Remove the front panel.
- (2) Remove Typhoon Lock front the cabinet. (AKT Series only)
- (3) Slide out the unit from the cabinet.
- (4) Fix the cabinet to the timber frame using sponge rubber and screws so that the condenser air inlet louver is placed outside the wall. If required, support the cabinet in the wall with brackets and completely weather seal any gap between the cabinet and the wall. When making a hole in the thermal insulating material attached to the cabinet, be sure that the material is cut off beforehand to prevent curling.
- (5) Push the unit completely back into the cabinet.
- (6) Next, fit the attached opcel into the space between the cabinet and the bottom of the unit with a screw driver to seal the room inside from the outside.
- (7) Fix the unit to the cabinet with typhoon lock. (AKT Series only)



(1) Air Conditioner Fitted into { 229 mm (9") Cavity Wall.
 { 178 mm (7") Cavity Wall.



Series	Measurement A
AKT	240 mm (9-1/2")
AFT	248 mm (9-3/4")
ALT	356 mm (14")
AXT	286 mm (11-1/4")

Fig. 1 Side View

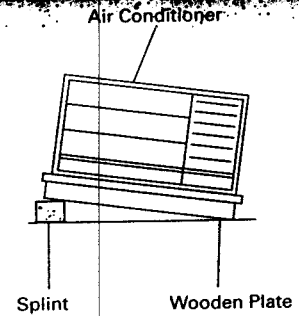
4. Preparation of the Air Conditioner for Installation

How to remove packaging

AFT/ALT/AXT series

Cut off plastic bands and take out exterior packaging. Then remove the air conditioner from the wooden plate in the following way:

- (1) Place a 80-100 mm high splint under the left edge.
- (2) Using a spanner, remove the fixed bolt. (M8 x 50 mm)
- (3) Place the same splint under the right edge.
- (4) Remove fixed bolt on this side as for (2).

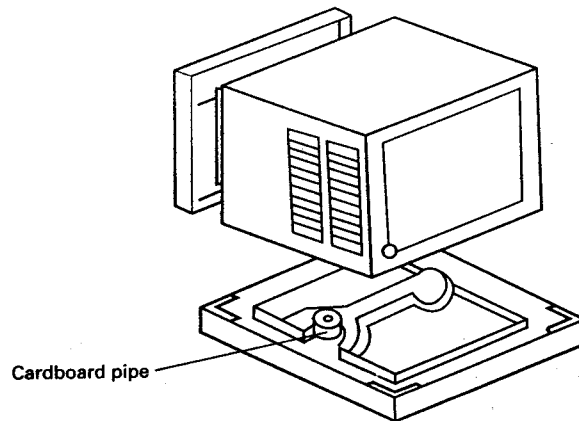


AKT series

Cut off plastic bands, open the package. Then remove the air conditioner from the plate in the following way.

- (1) Pull out the bands around the air conditioner and remove it from the package.
- (2) After taking out the front panel, remove the air conditioner from the plate.

Note: After the air conditioner is removed from the plate, cardboard pipe must also be removed from the set.



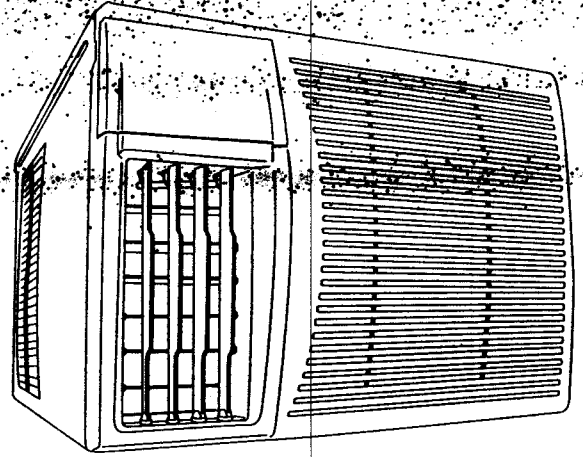
How to make a solid timber frame

Timber frame inside dimensions are calculated by allowing for the insertion dimensions of sponge rubber used for shock prevention and sealing.

Inside measurements of frame = air conditioner cabinet dimensions + twice the thickness of the rubber strip to be used.

The recommended rubber strip is "Industrial Sponge Rubber 52 mm (2") wide x 6 mm (1/4") Thick-black, Shore A Durometer hardness 20-30.

Thyer Rubber Co. Pty,Ltd., Serial No. T22".



AKT9R
AKT7R

OPERATING MANUAL



ROOM AIR CONDITIONER

CONTROL	POSITION	FUNCTION
MASTER CONTROL	HIGH POWER (RED)	Fan (High Speed) and compressor operate – Rapid heating effect at top capacity.
	SUPER QUIET (RED)	Fan (Low Speed) and compressor operate – Intermediate heating effect and reduced operating noise.
	HIGH FAN	High fan speed without heating/cooling – Room air is circulated and cleaned.
	⓪ (OFF)	The air conditioner is switched off.
	LOW FAN	Low fan speed without heating/cooling – Room air is circulated and cleaned.
	SUPER QUIET (BLUE)	Fan (Low Speed) and compressor operate – Intermediate cooling effect and reduced operating noise.
	HIGH POWER (BLUE)	Fan (High Speed) and compressor operate – Rapid cooling effect at top capacity.
THERMOSTAT	WARM-COOL	Amount of heating/cooling is maintained automatically. Turn knob counterclockwise/clockwise to obtain most comfortable heating/cooling.
EXHUAUST AIR	CLOSE	Exhaust vent is closed and room air is circulated.
	OPEN	Stale air is drawn outside.

(2) Air Conditioner Fitted into thick Walls

This diagram applies to the placement of the air conditioner in walls greater than 229 mm (9") thick.

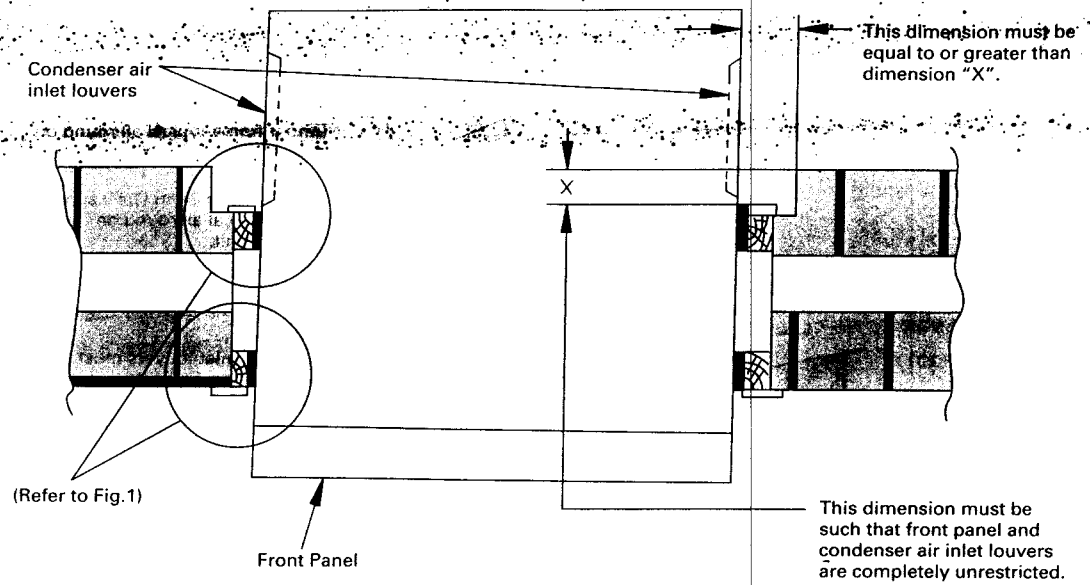


Fig. 2 Top View

(3) Air Conditioner Fitted into Timber Framed Wall or Partition

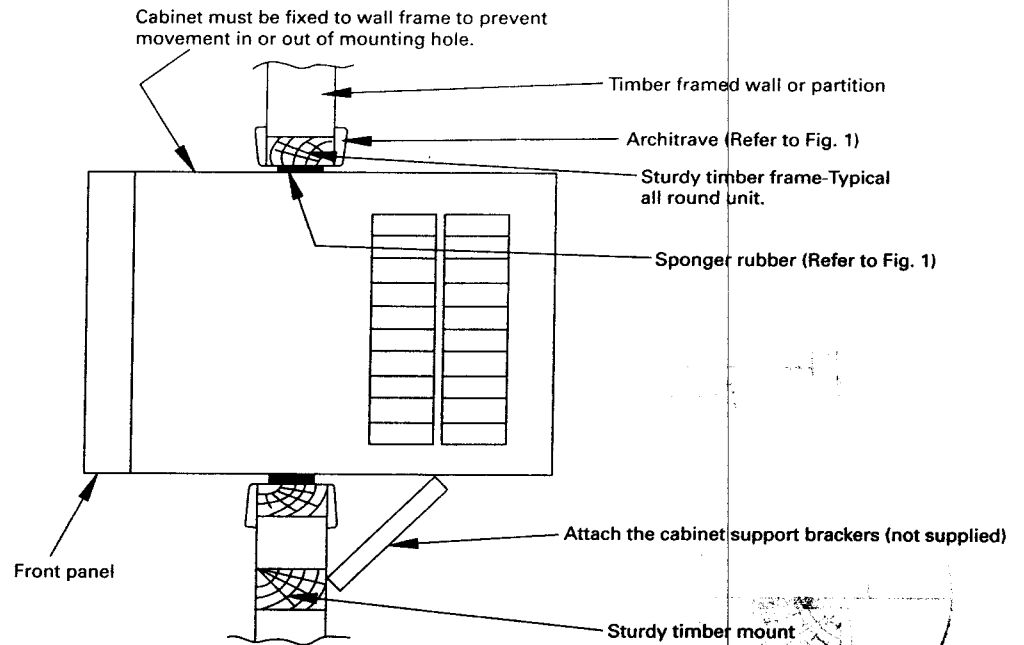


Fig. 3 Side View

CAUTION: When fitting the air conditioner in such a thin wall place it so that its center of gravity is supported by the wall and the cabinet supported by brackets.

NOTE:

1. A fuse may blow when a particularly large demand for electricity, which exceeds the capacity of the fuse, occurs in your home or when the voltage of the main power line drops due to some fault. If the fuse blows again after replacement with a new one, please call your dealer or service company.
2. Your air conditioner also acts to dehumidify the room air and to expel the water produced, therefore drops of water emitting from the outside of the unit is quite normal.
3. Please note, your room air conditioner will automatically control the room temperature within the thermostat range..... 16 °C (cooling) and 32 °C (heating - reverse cycle type).
4. The noise level of your air conditioner may be felt to be higher at night than during the day. This is quite normal. This results from the fact that environmental noise level is lower at night so the noise level of the air conditioner is felt to be relatively higher.
5. When defrosting under heating operation, the curious sound which may be heard is quite normal.

Things to Do before Calling a Serviceman

1. If your air conditioner does not operate check the following items before calling for service.
 - a) Check that the power plug is properly connected to the power socket.
 - b) Check the fuses.

2. When cooling or heating effect is not obtained even with the air conditioner operating make the following checks.
 - a) Check that the thermostat setting is higher than the room temperature when cooling.
 - b) Check that the thermostat setting is lower than the room temperature when heating.
 - c) Check the filter. A clogged filter will reduce cooling efficiency. When filter is excessively dirty cooling coils may ice up.
 - d) If the cooling coils are iced up, wash the filter. To get rid of the ice quickly operate the air conditioner with the MASTER CONTROL knob on "HIGH or LOW FAN" position until all the ice has gone.

General Information

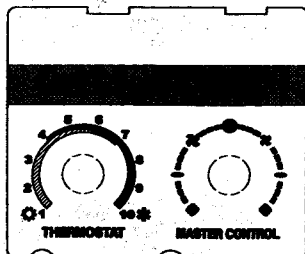
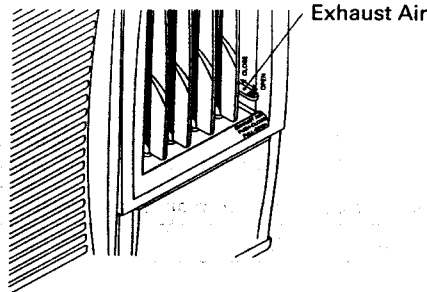
1. When the ambient temperature drops to 21 °C (70 °F) or less, icing-up may occur on the inside cooling coils, and is quite normal (when cooling).
2. The compressor motor does not require lubrication as it contains sufficient oil.
3. No lubrication is required for the bearings of the fan motor as dust shielded ball bearings containing grease are fitted.

Before Starting

In order to enable efficient and trouble-free operation of your air conditioner, connect the power plug of your air conditioner through an exclusive circuit, having a time delay fuse, to the correct power supply described on the rating plate.

Control Panel

Operation controls provided are, MASTER CONTROL, THERMOSTAT, EXHUAUST AIR.



Air Direction Control

Super Wave

When the SUPER WAVE switch is put on, the SUPER WAVE moves and blows air to the left and right (See Figure 1). On attaining the desirable direction of the air blow and on putting off the SUPER WAVE switch, the air blow in that particular direction can be achieved. Do not move the SUPER WAVE's inside the outlet with the hand as it might cause damage.

The SUPER WAVE's do not move even if the SUPER WAVE switch is in the MASTER CONTROL ● (OFF) position.

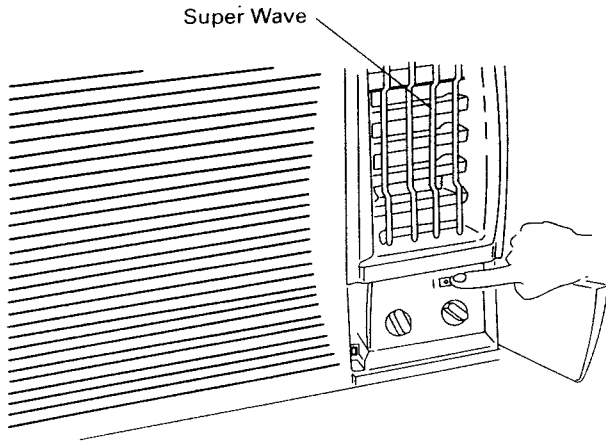


Fig. 1

Horizontal Louvers

For horizontal air direction control, rotate the horizontal louvers upward or downward (See Fig. 2).

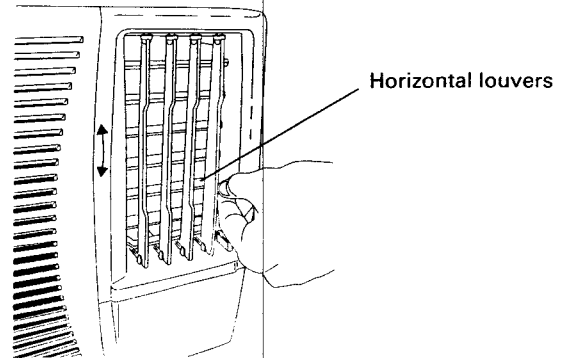


Fig. 2

- When the thermostat control is positioned at "10", the room-side fin coil may freeze up due to excessively low room temperature (for example, below 18 °C) caused by low outdoor temperature at night. Once the fin coil becomes frozen, the air flow from the air conditioner is restricted by the frost, and the room temperature may rise due to the resultant weak cooling performance of the air conditioner.
- The thermostat positions "8", "9" and "10" can be used when the room temperature does not become sufficiently low. This condition may occur when the thermostat switches off automatically because cooled air, when it passes through the horizontal louvers positioned downwards and the vertical louvers positioned to the left, makes a short circuit and the recirculated air touches the sensor of the thermostat.

Important

When cooling/heating is stopped by means of either the MASTER CONTROL or THERMOSTAT CONTROL do not restart cooling/heating for at least three (3) minutes. If cooling/heating is restarted within this time, the compressor motor will be subjected to an over current and a compressor motor safety device will be actuated. If this occurs, restarting cooling/heating will not be possible for 20 minutes.

Automatic Defrosting

When continuous heating is effected for a long period of time with low outside temperatures, the condenser tends to frost up and heating efficiency will drop. To prevent this condition, the unit is equipped with an automatic defrosting cycle. After 5 or so minutes the frost will have melted and the normal heating function is then automatically returned.

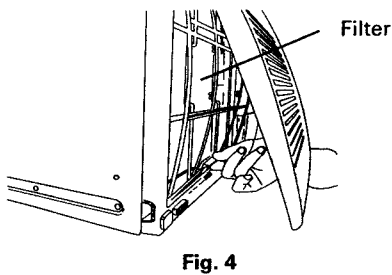
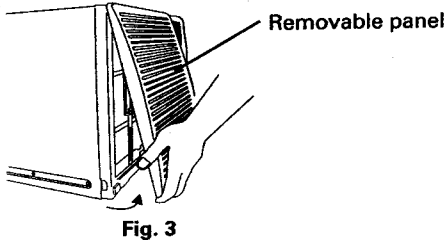
Exhaust Air Control

By setting the EXHAUST control lever to an appropriate position between "OPEN" and "CLOSE" positions, it is possible to expel the room air to the desired extent. The quantity of air to be expelled will increase when the lever is positioned closer to the "OPEN" position.

NOTE: Cooling/heating effect will be reduced when operating EXHAUST open.

Room Air Filter

A filter is provided on the rear of the panel. Since the function of this filter dust and dirt in the air, please wash it regularly with clean water before it becomes clogged with dust. If it is very dirty, rinse it in synthetic detergent before washing in clean water. Allow the filter to dry thoroughly in the shade after washing. Remove the filter from the front panel assembly by pulling rightward (See Fig. 3)



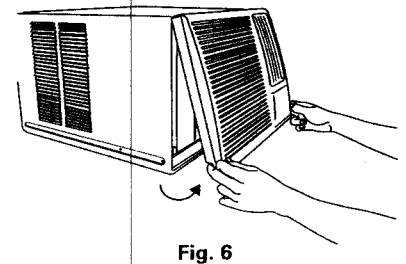
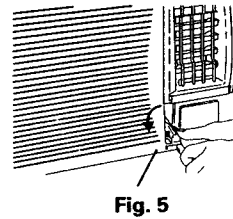
How to Remove and Refit the Front Panel

Remove the front panel in the following manner:

- (1) Remove the filter from the front panel by pulling rightward and remove the screw which secures the front panel (Fig. 4).
- (2) Hold the bottom edge of the front panel and lift up to the front by pushing leftward (Fig. 5).

Refit the front panel in the following manner:

- (1) Insert the two clips on the upper part of the panel into the two slots on top of the cabinet.
- (2) Push the bottom of the panel into engage the remaining a clip at the left side bottom corner.
- (3) Fasten the screw and attach the filter.



-6-

Cooling

To obtain maximum cooling effect in the hot summer select position HIGH POWER (BLUE) on the MASTER CONTROL. Maximum moisture removal, air circulation and dust removal are effected at the same time.

Selection of SUPER QUIET (BLUE) reduces operating noise.

Heating

To obtain maximum heating effect in severe winter select position HIGH POWER (RED) on the MASTER CONTROL. Maximum air circulation is obtained at the same time. Selection of SUPER QUIET (RED) reduces heating effect and operating noise. However you may feel a higher temperature at the air outlet compared to the HIGH POWER (RED) position, due to the reduced fan speed.

NOTE: After you start driving, it will take approximately 10 minutes for the air from this unit become warm. This delay is normal.

Air Circulation

To maintain a comfortable room temperature, an important factor is the circulation of air. Room air can be circulated without cooling/heating by selecting either HIGH FAN or LOW FAN position on the master control.

Circulation of air without cooling/heating can be also effected as followed:

1. When operating with the MASTER CONTROL switched to HIGH POWER (RED) or SUPER QUIET (RED), turn the thermostat fully clockwise.

2. When operating with the MASTER CONTROL switched to HIGH POWER (BLUE) or SUPER QUIET (BLUE), turn the thermostat fully counterclockwise.

Thermostat Control

Once the thermostat is set to the desired temperature, the room temperature will be automatically adjusted without excessive or insufficient cooling/heating and thus a comfortable environment is always maintained.

When cooling, turn the THERMOSTAT knob counterclockwise to increase cooling effect.

When heating, turn the THERMOSTAT knob counterclockwise to increase heating effect.

The thermostat controls the compressor only, and accordingly the fan is constantly circulating air even during the period when the compressor is off during cooling/heating operation.

To stop the cooling/heating operation set the master control (OFF) position.

1. When you wish to lower the temperature, turn the thermostat control clockwise in the direction of the higher numbers on the dial.
2. When you wish to increase the temperature, turn the thermostat control counterclockwise in the direction of the lower numbers.
3. When the thermostat is set at positions 25°, 26° or 27° comfortable room temperatures can usually be obtained.

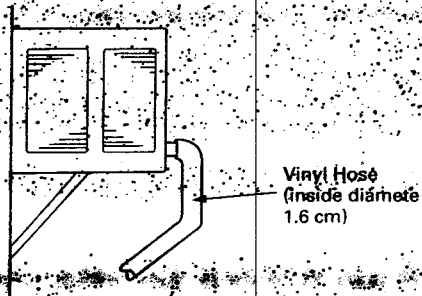
Please note that it is unhealthy for the room temperature to be lower than approximately 22 °C.

(8) Refit the front panel.

(9) Drainage works

- a) AKT 7
AKT 9

Connect a vinyl hose or a substitute to the drain tube for water drainage.
(Hose inside diameter: 1.6 cm)



- b) AFT
ALT
AXT
AKT7R
AKT9R
- } series

Fix an attached drain boat to the bottom of cabinet and connect a sort vinyl hose to it for water drainage.
(Hose inside diameter: 1.6 cm)

Note: If the drainage work is abnormal (a broken pipe, an extremely long horizontal pipe, an unstraight pipe, for instance), the water may overflow the piping.

