(PART NO. 9372816011)

⚠ WARNING	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
⚠ CAUTION	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

This air conditioner uses new refrigerant HFC (R410A).

The basic installation work procedures are the same as conventional refrigerant (R22) models. However, pay careful attention to the following points:

- (1) Since the working pressure is 1.6 times higher than that of conventional refrigerant (R22) models, some of the piping and installation and service tools are special. (See the table below.)
- Especially, when replacing a conventional refrigerant (R22) model with a new refrigerant R410A model, always replace the conventional piping and flare nuts with the R410A piping and flare nuts.

(2) Models that use refrigerant R410A have a different charging port thread diameter to prevent erroneous charging with

conventional refrigerant (R22) and for safety. Therefore, check beforehand. [The charging port thread diameter for R410A is

- (3) Be more careful that foreign matter (oil, water, etc.) does not enter the piping than with refrigerant (R22) models. Also, when storing the piping, securely seal the openings by pinching, taping, etc.
- (4) When charging the refrigerant, take into account the slight change in the composition of the gas and liquid phases, and always charge from the liquid phase side whose composition is stable.

Special tools for P/10A

1/2 UNF 20 threads per inch.]

Special tools for H410A					
Tool name	Contents of change				
	Pressure is high and cannot be measured with a conventional gauge. To prevent erroneous mixing of other				
Cours monifold	refrigerants, the diameter of each port has been changed.				
Gauge manifold	It is recommended the gauge with seals –0.1 to 5.3 MPa (–76 cmHg to 53 kgf/cm²) for high pressure.				
	-0.1 to 3.8 MPa (-76 cmHg to 38 kgf/cm²) for low pressure.				
Charge hose	To increase pressure resistance, the hose material and base size were changed.				
Vacuum pump	A conventional vacuum pump can be used by installing a vacuum pump adapter.				
Gas leakage detector	Special gas leakage detector for HFC refrigerant R410A.				

It is necessary to use seamless copper pipes and it is desirable that the amount of residual oil is less than 40 mg/10m. Do not use copper pipes having a collapsed, deformed or discolored portion (especially on the interior surface). Otherwise, the expansion value or capillary tube may become blocked with con-

As an air conditioner using R410A incurs pressure higher than when using R22, it is necessary to choose adequate materials.

Thicknesses of copper pipes used with R410A are as shown in Table1. Never use copper pipes thinner than 0.8 mm (Normal diameter is 3/8 in.), 1.0 mm (Normal diameter is 5/8 in.) even when it is available on the market.

		Thickne	ss (mm)
Nominal diameter (inch)	Outer diameter (mm)	R410A	[ref.] R22
3/8	9.52	0.80	0.80
5/8	15.88	1.00	1.00

For authorized service personnel only

(1) For the room air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.

- (3) Installation work must be performed in accordance with national wiring standards by authorized personnel only.
- (4) If refrigerant leaks while work is being carried out, ventilate the area. If the refrigerant comes in contact with a flame, it

(5) Do not use an extension cord.

(6) Do not turn on the power until all installation work is complete.

- Be careful not to scratch the room air conditioner when handling it.
- After installation, explain correct operation to the customer, using the operating manual.

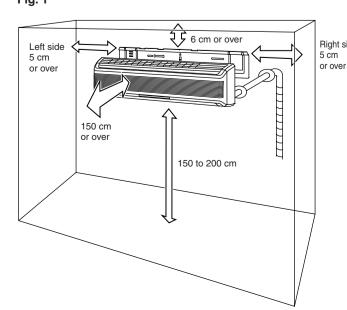
SELECTING THE MOUNTING POSITION

Decide the mounting position with the customer as follows:

1. INDOOR UNIT

able to blow all over the room (3) Do not install the unit where it will be exposed to direct sunlight. (4) Install the unit where connection to the outdoor unit is easy.

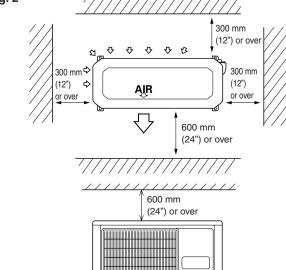
(6) Take servicing, etc. into consideration and leave the spaces shown in



2. OUTDOOR UNIT

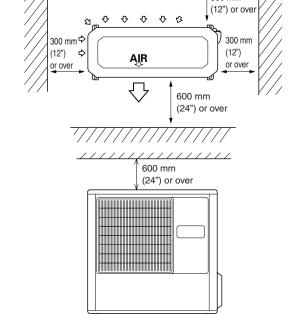
light. (If necessary, install a blind that does not interfere with the air flow.) (2) Do not install the unit where a strong wind blows or where it is very dusty. (3) Do not install the unit where people pass.

by air blowing into their windows or by noise (5) Provide the space shown in Fig. 2 so that the air flow is not blocked.



(1) If possible, do not install the unit where it will be exposed to direct sun-(4) Take your neighbors into consideration so that they are not disturbed

Also for efficient operation, leave open three of the four directions front, rear, and both sides.



STANDARD ACCESSORIES

The following installation accessories are supplied. Use them as required.

INDOOR UNIT ACCESSORIES Name and Shape Q'ty Wall hook bracket For indoor unit installation Use for air conditioner control unit Battery (penlight) For remote control unit

Remote control Use as remote control unit unit holder

For wall hook bracket For remote control unit Tapping screw (small) $(ø3 \times 12)$ holder installation

OUTDOOR UNIT ACCESSORIES

Cable clip	2	For power supply cord binding
Tapping screw	1	For fixing the valve cover
Drain pipe	1	For outdoor unit drain piping work [Heat & Cool model
Drain cap	2	(Reverse cycle) only]

INDOOR UNI

Table 1 Thicknesse	es of	Annealed Cop	per Pipes
	Thickne	ss (mm)	
Nominal Outer diam diameter (inch)	eter	R410A	[ref.] R22
3/8 9.52		0.80	0.80
5/8 15.88		1.00	1.00

		<u> </u>	VARNING	ì			

(2) Connect the indoor unit and outdoor unit with the room air conditioner piping and cords available standards parts. This installation instruction sheet describes the correct connections using the installation set available from our standard parts.

produces a toxic gas.

- Let the customer keep this installation instruction sheet because it is used when the air conditioner is serviced or moved.

↑ WARNING

Install at a place that can withstand the weight of the indoor and outdoor units and install positively so that the units will not

↑ CAUTION

(1) Do not install where there is the danger of combustible gas leakage

(2) Do not install near heat sources.

(3) If children under 10 years old may approach the unit, take preventive measures so that they cannot reach the unit.

(1) Install the indoor unit level on a strong wall which is not subject to (2) The inlet and outlet ports should not be obstructed: the air should be

(5) Install the unit where the drain pipe can be easily installed.

Fig. 1. Also install the unit where the filter can be removed.

ELECTRICAL REQUIREMENT

25 m (82 ft)

30 m (98 ft)

CONNECTION PIPE REQUIREMENT

Small Large

9.52 mm | 15.88 mm |

(3/8 in.) (5/8 in.)

• Use pipe with water-resistant heat insulation.

15.88 mm _(5/8") dia.

9.52 mm

(3/8") dia.

Maximum Heigh

15 m (49 ft

15 m (49 ft)

Electric wire size and fuse capacity:

Heat&Cool model | 9.52 mm | 15.88 mm |

(Reverse cycle) | (3/8 in.) | (5/8 in.)

OUTDOOR UNIT

3		
MAX.	4.0	
MIN.	3.5	
MAX.	2.5	
MIN.	1.5	
Fuse capacity (A)		
	MAX. MIN. MAX.	

- Install the disconnect device with a contact gap of at least 3 mm nearby the units. (Both indoor unit and outdoor unit)
- Always make the air conditioner power supply a special branch circuit and provide a special breaker.
- Always use H07RN-F or equivalent as the power supply cord and the

INSTALLATION PROCEDURE

. WARNING

1) Install the wall hook bracket so that it is correctly posi-

(2) As the weight of the indoor unit is 15 to 18 kg (33 to 40

bracket is tilted, water will drip to the floor.

support the weight.

Fig. 6 UNIT [mm]

tioned horizontally and vertically. If the wall hook

lbs), it should be installed after properly examining the

place where it is intended to be installed. If the place is

not strong enough, a plank or girder should be used to

make the place sufficiently strong so that the wall can

8-12x18hole

23/32" (18 mm) max.

(Handle of screwdriver)

2. CUTTING THE HOLE IN THE WALL FOR THE

. WARNING

If the wall pipe is not used, the cord interconnecting the

indoor and outdoor units may touch metal and cause elec-

CONNECTING PIPING

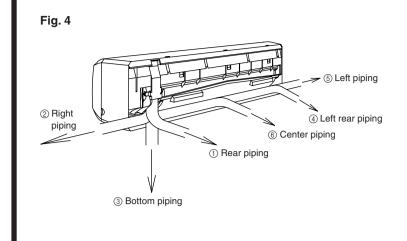
tric leakage.

Fig. 22

Fig. 23

INDOOR UNIT INSTALLATION

The piping can be connected in the six directions indicated by (1), (2), (3), 4, 6 and 6 in Fig. 4. When the piping is connected in direction 2 or 5, cut along the piping groove in the side of the front panel with metal shears. When connecting the piping in direction ③, cut along the piping groove at the bottom of the front panel.

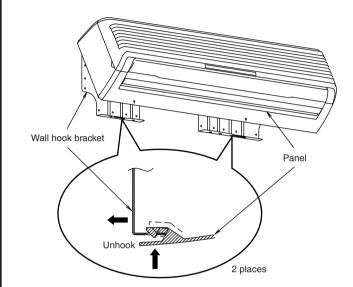


1. INSTALLING THE WALL HOOK BRACKET [Removing THE WALL HOOK BRACKET]

Remove the wall hook bracket in the following order. (1) Remove the hook inside the panel. (Fig. 5)

(2) Pull off the wall hook bracket.

Fig. 5



[Installation directly to a wall]

Before fastening the wall hook bracket to the wall with the screws, level it by tapping the hook at the center of bracket to the wall with the handle of a screwdriver.

- Fasten the wall hook bracket to the wall with 6 or more screws and anchor bolts through the holes near the outer edge of the bracket. • Do not install the wall hook bracket at only one place or at an angle. For a concrete wall, embed anchor bolts (10 mm dia.) into the wall at the wall hook bracket holes (11 \times 43 mm dia. and 11 \times 94 mm dia. (Fig. 6)). Allow the anchor bolts to stick out at least 18 mm from the wall. (Fig. 7) Install the unit to the anchor bolts with nuts through the wall hook bracket.
- Use 2 bolts for concrete wall and 4 bolts for blister concrete wall (Fig. 8). Finally tighten the bolts and tapping screws after confirming, using the level indicator, that the clamp is horizontal.

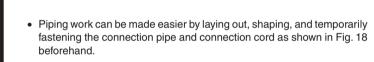
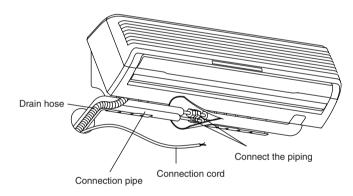
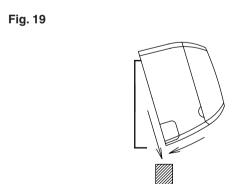
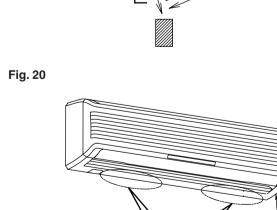


Fig. 18 (4) Left rear piping)







Wall hook bracket

Method B

(1) Open the screw cover and intake grille. (Fig. 21)

(5) Mount the drain hose and pipe to the indoor unit. (Fig. 24)

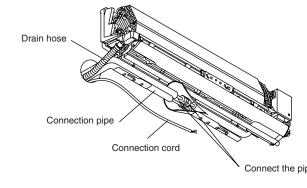
(6) Hang the inside panel hook and then mount the panel and secure it

(2) Remove the seven tapping screws. (Fig. 22) (3) Remove the panel. (Fig. 23) (4) Mount the indoor unit to the wall hook bracket.

with seven tapping screws. (Fig. 25)

• Piping work can be made easier by laying out, shaping, and temporarily fastening the connection pipe and connection cord as shown in Fig.

Fig. 24 (4) Left rear piping



Insert the drain hose until it

butts against the drain port.

(1) Cut a 80 mm diameter hole in the wall at the position shown in Fig. 9.

(2) When cutting the wall hole at the inside of the installation frame, cut

(3) Cut the hole so that the outside end is lower (5 to 10 mm) than the

(4) Always align the center of the wall hole. If misaligned, water leakage

(5) Cut the wall pipe to match the wall thickness, stick it into the wall cap,

(The connection pipe is supplied in the installation set.) (Fig. 9).

(6) For ⑤ left piping and ② right piping, cut the hole a little lower so that

fasten the cap with vinyl tape, and stick the pipe through the hole.

When cutting the wall hole at the outside of the installation frame, cut

the hole to a point of intersection of center marks.

the hole at least 10 mm below less.

3. ATTACH THE DRAIN HOSE

nected properly, leaking will occur.

hose to the drain port on its opposite side.

Insert the drain cap until it

butts against the drain port.

• The drain hose and drain cap are used as they are.

↑ CAUTION

Insert the drain hose and drain cap into the drain port.

making sure that it comes in contact with the back of the

drain port, and then mount it. If the drain hose is not con-

[For ① Rear piping, ② Right piping and ③ Bottom piping]

[For 4 Left rear piping, 5 Left piping and 6 Center piping]

• Remove the drain cap and drain hose. Mount the drain cap and drain

inside end.

will occur.

Tapping scre Wall hook .

OUTDOOR UNIT INSTALLATION

↑ WARNING (1) Install the unit where it will not be tilted by more than 5 (2) When installing the outdoor unit where it may exposed to strong wind, fasten it securely.

• Set the unit on a strong stand, such as one made of concrete blocks to minimize shock and vibration • Do not set the unit directly on the ground because it will cause trouble.

· Since the drain water flows out of the outdoor unit during heating op-

eration, install the drain pipe sold separately and connect it to an commercial 16 mm hose. (Heat & Cool model (Reverse cycle) only) • When installing the drain pipe, plug all the holes (• holes at two places) other than the drain pipe mounting hole in the bottom of the outdoor unit with putty so there is no water leakage. (Fig. 26) (Heat & Cool

CAUTION Installation in cold regions. Do not use the accessory drain

model (Reverse cycle) only)

(If the drain pipe is used, the drain water in the pipe may freeze in extremely cold weather.)

4. CUT-OUT FOR PIPING ON FRONT PANEL

[For ② Right piping, ③ Bottom piping and ⑤ Left piping] • Use a metal shears or other cutting tool to cut along the groove in the plastic for the piping that will coming out of the front panel.

For ⑤ Left piping

5. FORMING THE DRAIN HOSE AND PIPE

CAUTION

(1) Do not remove the flare nut from the indoor unit pipe until immediately before connecting the connection (2) To prevent breaking of the pipe, avoid sharp bends.

Bend the pipe with a radius of curvature of 100 mm or

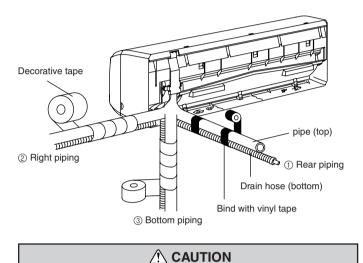
(3) If the pipe is bent repeatedly at the same place, it will

[For ① Rear piping, ② Right piping and ③ Bottom piping] • Install the indoor unit piping in the direction of the wall hole and bind the drain hose and pipe together with vinyl tape (Fig. 12).

• Install the piping so that the drain hose is at the bottom.

Fig. 12

For ② Right piping



Do not wrap the tape too tightly on drain hose. If the tape is too tight (as shown in the Figure below) the insulation effect will be lost and the moisture from condensation may

Fig. 13 Bad Example

Vinyl Tape Too Tight

804 mm (31-21/32")

Outdoor unit connection cord and pipe connection preparations:

CONNECTING THE PIPING

↑ WARNING

If the existing materials are used, the pressure inside the

refrigerant cycle will rise and cause breakage, injury, etc.

CAUTION

Prevent mineral oil from getting into the system as this

(2) While welding the pipes, be sure to blow dry nitrogen

(3) The maximum lengths of this product are shown in ta-

ble 2. If the units are further apart than this, correct

Do not use the existing (for R22) piping and flare nuts.

(Use the special R410A materials.)

(1) Do not use mineral oil on flared part.

operation can not be guaranteed.

gas through them.

would reduce the lifetime of the units.

* After removing the screws,

Valve cover take

off direction.

remove valve cover.

Remove outdoor unit valve cover.

• Perform "5 ELECTRICAL WIRING" before performing this piping. • Wrap the pipes of the indoor unit that are visible from the outside with decorative tape

• After passing the indoor piping and drain hose through the wall hole,

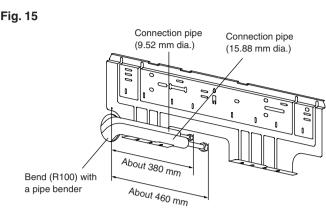
hang the indoor unit on the hooks at the top of the wall hook bracket.

[For 4 Left rear piping, 5 Left piping and 6 Center piping]

end of the pipe to the dimensions shown in Fig. 15 and form the con-Bend the connection piping at a bend radius of at least 100 mm and

• For 4 Left rear piping, 5 Left piping and 6 Center piping, preset the

position it no more than 50 mm from the wall.

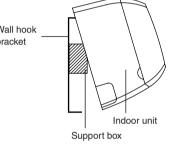


• The two methods for mounting the drain hose and piping (4), (5) and (6) are as shown below. Please choose the most efficient method of installation. Method A: Floating the panel method. Method B: Removing the panel.

Method A

(1) Create a box using material from the packing carton. This box is called the support box. (Fig. 16) (2) Mount the indoor unit to the wall hook bracket.

(3) Insert the support box between the indoor unit and wall hook bracket. (Fig. 17) (4) Mount the drain hose and pipe to the indoor unit. (Fig. 18) (5) Remove the support box from the indoor unit. (Fig. 19) (6) Hang the inside panel hook. (Fig. 20)



(1) Cut the connection pipe to the necessary length with a pipe cutter. (2) Hold the pipe downward so that cuttings will not enter the pipe and

(3) Insert the flare nut (always use the flare nut attached to the indoor and outdoor units respectively) onto the pipe and perform the flare processing with a flare tool. Use the special R410A flare tool, or the conventional (for R22) flare

When using the conventional flare tool, always use an allowance ad-

justment gauge and secure the A dimension shown in table 4. Check if [L] is flared uniformly and is not cracked or scratched.

Table 4 Pipe outside diameter

Dina autoida		A (mm)	
Pipe outside diameter	Flare tool for	Conventional (R22) flare to	
Giameter	R410A, clutch type	Clutch type	Wing nut type
9.52 mm (3/8 in.)	0 to 0.5	1.0 to 1.5	1.5 to 2.0
15 00 mm /5/0 im \	0.4-0.5	4.01-4.5	0.01-0.5

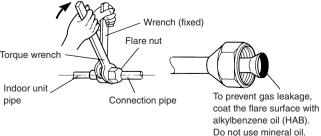
(1) When bending the pipe, be careful not to crush it. vature of 100 mm or over.

(3) If the copper pipe is bend the pipe or pulled to often, it will become stiff. Do not bend the pipes more than three times at one place.

3. CONNECTION

(1) Install the outdoor unit wall cap (supplied with the optional installation set or procured at the site) to the wall hole pipe. (2) Connect the outdoor unit and indoor unit piping.

(3) After matching the center of the flare surface and tightening the nut hand tight, tighten the nut to the specified tightening torque with a torque wrench.



Flare nut Tightening torque

9.52 mm (3/8 in.) dia.	33 to 42 N \cdot m (330 to 420 kgf \cdot cm)
15.88 mm (5/8 in.) dia.	63 to 77 N \cdot m (630 to 770 kgf \cdot cm)

- Continued on back -

15.88 mm (5/8 in.) 0 to 0.5 1.0 to 1.5 2.0 to 2.5

2. BENDING PIPES (2) To prevent crushing of the pipe, do not bend the pipe at a radius cur-

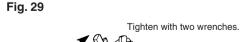


Table 5 Flare nut tightening torque

45 00 mm (5/0 in) dia
15.88 mm (5/8 in.) dia. 63 to 77 N · m (630 to 770 kgf · cm)

VACUUM PROCESS

⚠ CAUTION

(1) Do not purge the air with refrigerants but use a vacuum pump to vacuum the installation! There is no extra refrigerant in the outdoor unit for air purging!

(2) Use a vacuum pump for R410A exclusively. Using the same vacuum pump for different refrigerants may damage the vacuum pump or the unit.

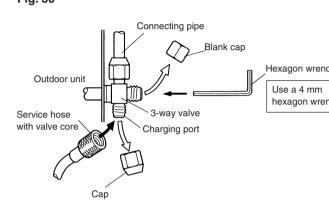
1. VACUUM

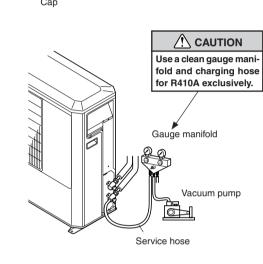
- (1) Remove the cap, and connect the gauge manifold and the vacuum pump to the charging valve by the service hoses. (2) Vacuum the indoor unit and the connecting pipes until the pressure
- gauge indicates -0.1 MPa (-76 cmHg). (3) When -0.1 MPa (-76 cmHg) is reached, operate the vacuum pump for at least 15 minutes.
- (4) Disconnect the service hoses and fit the cap to the charging valve to the specified torque
- (5) Remove the blank caps, and fully open the spindles of the 2-way and 3-way valves with a hexagon wrench (Torque: 6 to 7 N · m (60 to 70
- (6) Tighten the blank caps of the 2-way valve and 3-way valve to the specified torque.

Table 6

	Tightening torque
Blank cap (2-way valve)	20 to 25 N · m (200 to 250 kgf · cm)
Blank cap (3-way valve)	30 to 35 N · m (300 to 350 kgf · cm)
Charging port cap	10 to 12 N · m (100 to 120 kgf · cm)

Fig. 30





2. ADDITIONAL CHARGE

Refrigerant suitable for a piping length of 7.5 m is charged in the outdoor When the piping is longer than 7.5 m, additional charging is necessary. For the additional amount, see the table below.

	Т	able 7 - ((1)		
Pip	e length	7.5 m (25 ft)	10 m (33 ft)	15 m (49 ft)	20 m (66 ft)
Additional	Heat&Cool model (Reverse cycle)	None	100 g (3.5 oz)	300 g (10.6 oz)	500 g (17.7 oz)
efrigerant	Cooling model		250 g (8.9 oz)		

	1	Table 7 - (2)			
Pipe	e length	25 m (82 ft)	30 m (99 ft)		
tional	Heat&Cool model (Reverse cycle)	700 g (24.7 oz)	-	40 g/1 m (1.41 oz/3.3 ft)	
jerant	Cooling model	350 g (12.3 oz)	450 g (15.9 oz)	20 g/1 m (0.71 oz/3.3 ft)	

CAUTION

(1) When moving and installing the air conditioner, do not mix gas other than the specified refrigerant (R410A) inside the refrigerant cycle.

(2) When charging the refrigerant R410A, always use an electronic balance for refrigerant charging (to measure the refrigerant by weight).

(3) When charging the refrigerant, take into account the slight change in the composition of the gas and liquid phases, and always charge from the liquid phase side whose composi-

(4) Add refrigerant from the charging valve after the completion of the work. (5) If the units are further apart than the maximum pipe

length, correct operation can not be guaranteed.

3. GAS LEAKAGE INSPECTION

↑ CAUTION

After connecting the piping, check the joints for gas leakage with gas leak detector.

ELECTRICAL WIRING

⚠ WARNING 1) Before starting work, check that power is not being supplied to indoor unit and the outdoor unit.

2) Match the terminal block numbers and connection cord colors of the indoor unit and the outdoor unit. Erroneous wiring may cause burning of the electric parts. 3) Connect the connection cords firmly to the terminal

block. Imperfect installation may cause a fire. (4) Always fasten the outside covering of the connection cord with the cord clamp. (If the insulator is chafed, electric leakage may occur.)

(5) Always connect the ground wire.

HOW TO CONNECT WIRING TO THE TERMINALS

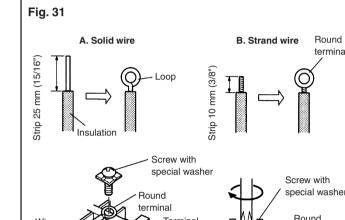
A. For solid core wiring (or F-cable)

- 1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 25 mm (15/16") to expose the solid wire. Using a screwdriver, remove the terminal screw(s) on the terminal
- (3) Using pliers, bend the solid wire to form a loop suitable for the) Shape the loop wire properly, place it on the terminal board and

tighten securely with the terminal screw using a screwdriver.

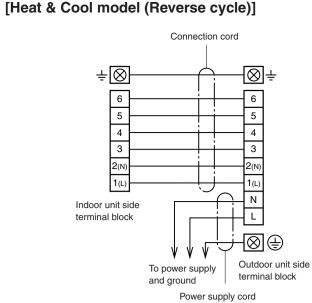
B. For strand wiring

-) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") to expose the strand wiring. 2) Using a screwdriver, remove the terminal screw(s) on the terminal
- 3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
- Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.

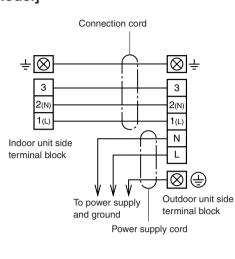


1. CONNECTION DIAGRAM

Fig. 32

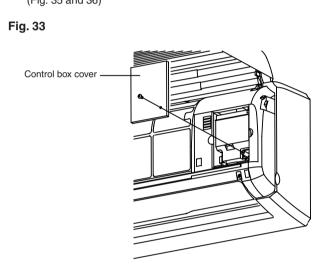


[Cooling model]



2. INDOOR UNIT SIDE

- (1) Open the intake grille. Remove the tapping screw for the control box cover and remove the control box cover. (Fig. 33) (2) Remove the tapping screw and while minding the cord holder hook,
- remove the cord holder. (Fig. 34) (3) Connect the end of the connection cord fully into the terminal block. (Fig. 35 and 36)

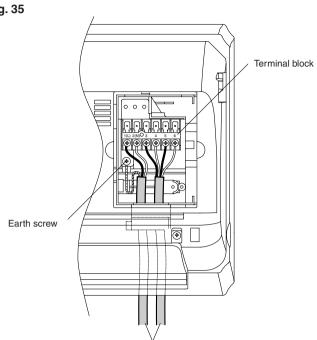


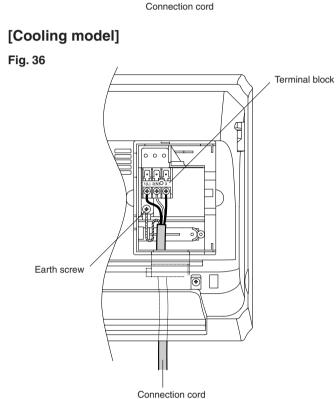
3. OUTDOOR UNIT SIDE

and fasten with the screws.

[Heat & Cool model (Reverse cycle)]

Fig. 34





CAUTION Use VW-1, 12 mm diamater, 0.5 to 1.0 mm thick, connection PVC tube as the insulation tube.

(1) Process the end of the connection cords to the dimensions shown in (2) Connect the end of the connection cord fully into the terminal block

(3) Fasten the sheath with a cord clamp. (Fig. 37) (4) Fasten the power supply cord and connection cord with a cable clip. (5) Install the valve cover. (Fig. 39-2)

Fig. 37

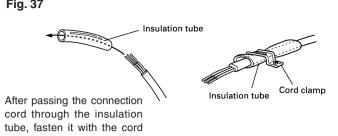
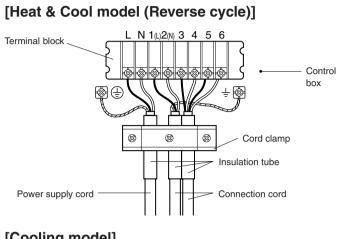
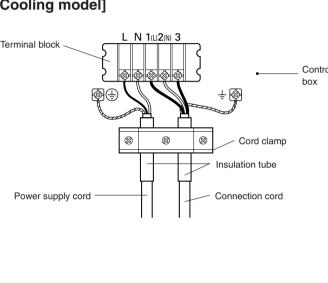
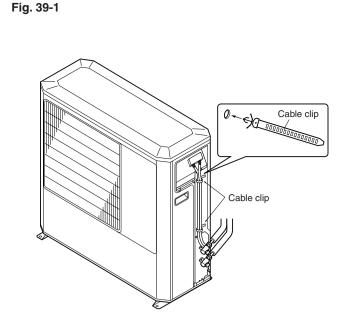


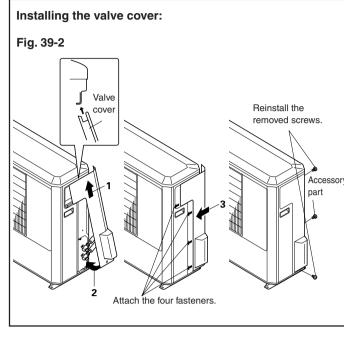
Fig. 38



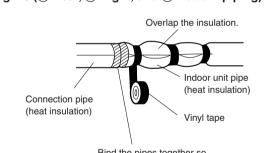
[Cooling model]



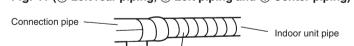




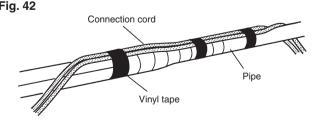
- (1) Insulate between pipes.
- For ① Rear, ② Right, and ③ Bottom piping, overlap the connection pipe heat insulation and indoor unit pipe heat insulation and bind them with vinyl tape so that there is no gap. (Fig. 40)
- them with vinyl tape so that there is no gap. (Fig. 41)



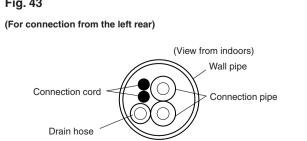
that there is no gap.



• For 4 Left rear piping, 5 Left piping and 6 Center piping bind the



• When connected from the left rear, the drain hose is at the bottom left of the wall pipe.

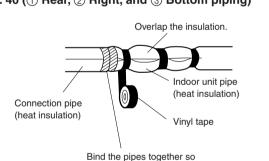


FINISHING

1. CONNECTION PIPE, CORD AND DRAIN HOSE

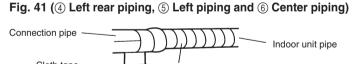
- For 4 Left rear and 5 Left piping, butt the connection pipe heat insulation and indoor unit pipe heat insulation together and bind

Fig. 40 (① Rear, ② Right, and ③ Bottom piping)

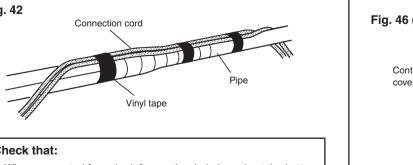


• For 4 Left rear piping, 5 Left piping and 6 Center piping, wrap the

area which accommodates the rear piping housing section with cloth



connection cord to the top of the pipe with vinyl tape.

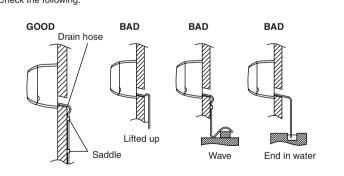


(2) Temporarily fasten the connection cord along the connection pipe with the pipe so that water does not enter.)

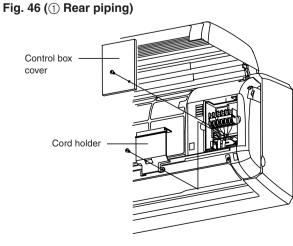
(3) Fasten the connection pipe to the outside wall with a saddle, etc. (4) Fill the gap between the outside wall nine hole a so that rain water and wind cannot blow in.

Fig. 45

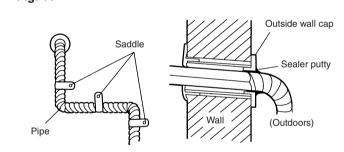
Check the following:



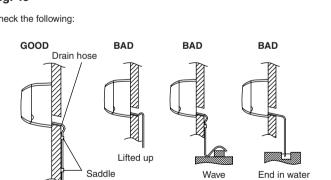
(1) Secure the cord holder with tapping screw. (Fig. 46) (2) Secure the control box cover and tapping screw. (Fig. 46) (3) Close the intake grille. (Fig. 47)



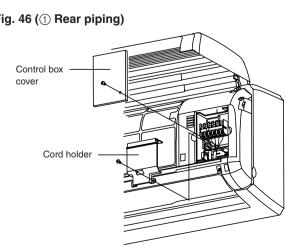
vinyl tape. (Wrap to about 1/3 the width of the tape from the bottom of

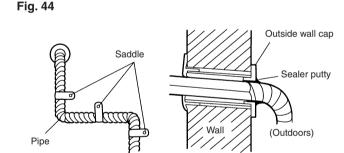


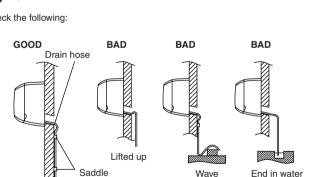
(5) Fasten the drain hose to the outside wall, etc.

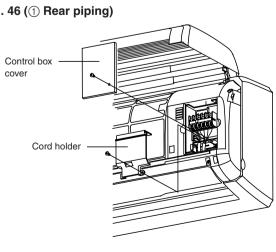


2. INSTALLING FINAL PARTS









Check that: • The top and bottom hooks are hooked firmly and the indoor unit does not move to the front and rear or left and right. • The indoor unit is accurately positioned horizontally and vertically.

(1) The rated voltage of this product is 230 V A.C. 50 Hz. (2) Before turning on the verify that the voltage is within

mm between the contacts of each pole.

and positively. (7) Install a leakage circuit breaker in accordance with the

⚠ CAUTION

POWER

!\ WARNING

(3) Always use a special branch circuit and install a spe-

(4) Use a circuit breaker matched to the capacity of the room air conditioner. (Install in accordance with stand-

related laws and regulations and electric company

(1) The power source capacity must be the sum of the room is insufficient, change the contracted capacity.

(2) When the voltage is low and the air conditioner is diffi-

cult to start, contact the power company the voltage

the 198 V to 264 V range.

cial breaker to supply power to the room air conditioner.

(5) The circuit breaker is installed in the permanent wiring. Always use a circuit that can trip all the poles of the wiring and has an isolation distance of at least 3

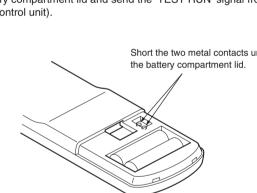
(6) Perform wiring work in accordance with standards so that the room air conditioner can be operated safely

air conditioner current and the current of other electrical appliances. When the current contracted capacity

Perform test operation and check items 1 and 2 below.

• The outdoor unit may not run, depending on the room temperature. In this case, the 'TEST RUN' signal is received during air conditioner operation (use a metallic object to short the two metal contacts under

Fig. 48



Test running

When the air conditioner is run by pressing the remote control unit test run button, the OPERATION and TIMER lamps flash slowly at

_	Error display			
Error contents	OPERATION (RED)	TIMER (GREEN)	SWING (ORANGE)	
door unit circuit board error	0	0	_	
door unit room temperature sensor re opened	2 times	0	_	
door unit room temperature sensor re short circuited	2 times	0	0	
door unit piping sensor wire opened	3 times	0	_	
door unit piping sensor short circuited	3 times	0	0	
door unit fan error	6 times	0	_	

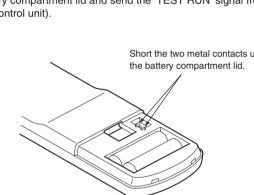
CHECK ITEMS

(4) Is the drain normal?

- (2) Does each lamp light normally?
- (1) Is there any abnormal noise and vibration during operation? (3) Is there any gas leakage?
- For the operation method, refer to the operating manual and perform operation check.

TEST RUNNING

- For the operation method, refer to the operating manual.



Operation can be checked by lighting and flashing of the display section OPERATION and TIMER lamps.

(1) INDOOR UNIT

- (1) Is operation of each button on the remote control unit normal? (3) Do not air flow direction louvers operate normally?
- (2) Will noise, wind, or drain water from the unit disturb the neighbors?

• Do not operate the air conditioner in the test running state for a long

- the battery compartment lid and send the 'TEST RUN' signal from the

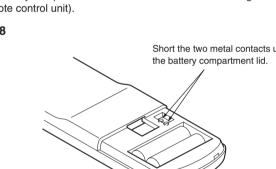


Table 8				
_	Error display			
Error contents	OPERATION (RED)		SWING (ORANGE)	
or unit circuit board error	0	0	_	
or unit room temperature sensor opened	2 times	0	_	
or unit room temperature sensor short circuited	2 times	0	0	
or unit piping sensor wire opened	3 times	0	_	
or unit piping sensor short circuited	3 times	0	0	
or unit fan error	6 times	0	_	

(5) Is there any abnormal noise and vibration during operation? (2) OUTDOOR UNIT

- remote control unit). Short the two metal contacts under
- Perform judgement in accordance with the following.
- The OPERATION, TIMER and SWING lamps operate as follows (Table 8) according to the error contents.

○ : Fast flashing● : Slow flashing— : Off

REMOTE CONTROL UNIT INSTALLATION

↑ CAUTION (1) Check that the indoor unit correctly receives the signal from the remote control unit, then install the remote control unit holder.

Avoid places in direct sunlight. Select a place that will not be affected by the heat from a stove, etc.

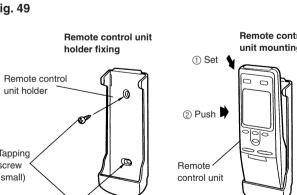
(2) Select the remote control unit holder selection site by

paying careful attention to the following:

1. REMOTE CONTROL UNIT HOLDER INSTALLA-• Install the remote control unit with a distance of 7 m between the remote control unit and the photocell as the criteria. However, when in-

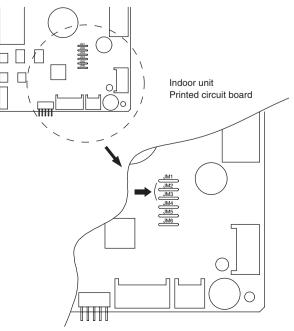
stalling the remote control unit, check that it operates positively.

Install the remote control unit holder to a wall, pillar, etc. with the tapping screw (Fig. 49).



2. SWITCHING REMOTE CONTROL UNIT SIGNAL

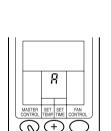
• Air conditioner settings



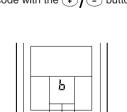
Remote control unit settings

Fig. 51





(3) Change the signal code with the \bigcirc / \bigcirc button (\nearrow \rightarrow \bigcirc \rightarrow \bigcirc \bigcirc).



play and change the signal code. Confirm the setting of the remote control unit signal code and the printed

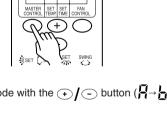
Jumper wire Remote control unit signal code JM2 Connect Connect A (Primary setting) Connect Disconnect Connect Disconnect

(1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit op-

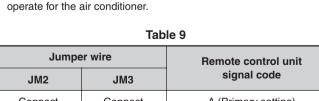
Explain the following to the customer in accordance with the operating

(4) If the signal code is changed, explain to the customer how it changed (the system returns to signal code A when the batteries in the remote control unit are replaced).





If these are not confirmed, the remote control unit cannot be used to



Disconnect

(2) Air filter removal and cleaning, and how to use the air louvers. (3) Give the operating manual and installation instruction sheet to the

Disconnect