(PART NO. 9359992097)

⚠ WARNING	This mark indicates procedures which, if improperly performed, might lead to the death or serious 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:

conventional piping and flare nuts with the R410A piping and flare nuts.

- (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
- (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 1/2 UNF 20 threads per inch.]
- (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 R410A

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/cm ²) 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

collapsed, deformed or discolored portion (especially on the interior surface). Otherwise, the expansion valve or capillary tube may become blocked with

of residual oil is less than 40 mg/10 m. Do not use copper pipes having a

- 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 Table 1. Never use copper pipes thinner than 0.8 mm (Nominal diameter is 1/4 in., 3/8 in.,
- 1/2 in.), even when it is available on the market.

Table 1 Thicknesses of Annealed Copper Pipes

		Thickness (mm)	
Nominal diameter (inch)	Outer diameter (mm)	R410A	[ref.] R22
1/4	6.35	0.80	0.80
3/8	9.52	0.80	0.80
1/2	12.70	0.80	0.80

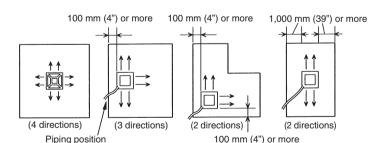
	A WARNING
ſ	(1) For the air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.
	(2) Connect the indoor unit and outdoor unit with the air conditioner piping and cords available from our standards parts. This installation instruction sheet describes the correct connections using the installation set available from our standard parts.
	(3) Installation work must be performed in accordance with national wiring standards by authorized personnel only.

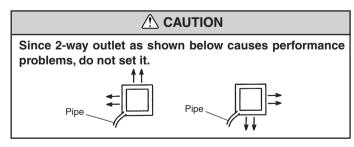
(4) Do not turn on the power until all installation work is complete.

- Be careful not to scratch the air conditioner when handling it.
- Let the customer keep this installation instruction sheet because it is used when the air conditioner is serviced or moved.

SELECTING THE MOUNTING POSITION

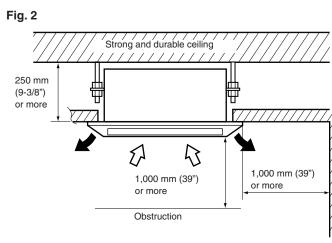
ditioner because it is very difficult to move from place after the first instal-





INDOOR UNIT

- (1) Install the indoor unit on a place having a sufficient strength so that it
- able to blow all over the room. (3) Leave the space required to service the air conditioner. (Fig. 2)
- (5) A place from where the air can be distributed evenly throughout the room by the unit.



The following installation parts are furnished. Use them as required. INDOOR UNIT ACCESSORIES

STANDARD PARTS

Name and Shape	Q'ty	Application
Coupler heat insulation	2	For indoor side pipe joint
Special nut A (large flange)	4	For installing indoor unit
Special nut B (small flange)	4	For installing indoor unit
Template O O	1	For ceiling hole cutting
Remote control unit	1	Use for air conditioner operation
Battery (penlight)	2	For remote control unit
Remote control unit holder	1	For mounting the remote control unit
Tapping screw (ø3 × 12)		For remote control unit holder installation

[18000 BTU/h model]

0 0 0 0 0 0 0

CONNECTION PIPE REQUIREMENT

↑ CAUTION

Install heat insulation around both the gas and liquid pipes.

Use heat insulation with heat resistance above 120 °C. (Re-

In addition, if the humidity level at the installation location

of the refrigerant piping is expected to exceed 70%, install

heat insulation around the refrigerant piping. If the ex-

pected humidity level is 70-80%, use heat insulation that

is 15 mm or thicker and if the expected humidity exceeds

In addition, use heat insulation with heat conductivity of

12000 BTU/h model 14000 and 18000

20 m (66 ft)

8 m (26 ft)

Small 6.35 mm (1/4 in.) 6.35 mm (1/4 in.

Large 9.52 mm (3/8 in.) 12.70 mm (1/2 in

20 m (66 ft)

8 m (26 ft)

OUTDOOR UNIT ACCESSORIES

Name	and Shape	Q'ty	Application
Drain pipe		1	For outdoor unit drain piping work
Drain cap	12000 and 14000 BTU/h models	2	[Heat & Cool model (Reverse cycle) only]
	18000 BTU/h model	1	

CRILLE ACCESSORIES

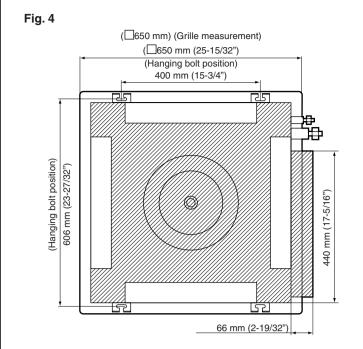
Name and Shane	O'+v	Application
Name and Shape	Q'ty	Application
Bolt	4	For mounting grille
Washer	4	For mounting grille
Spring washer	4	For mounting grille
Blower cover insulation	2	For discharged air

INSTALLATION PROCEDURE

Install the air conditioner as follows:

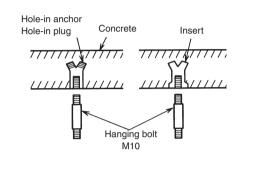
INDOOR UNIT INSTALLATION

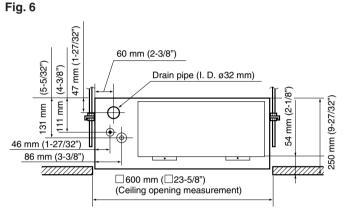
. Position the ceiling hole and hanging bolts as shown in Fig. 4.



2. Hanging preparations

Firmly fasten the hanging bolts as shown in Fig. 5 or by another method.





When bending the pipe, do not Fig. 13

heat insulating pipe with a pipe sharp cutter as shown in Fig.

collapsed. In this case, cut the Heat insulating

bend it as is. The pipe will be

13, and bend it after exposing

the pipe. After bending the pipe

as you want, be sure to put the

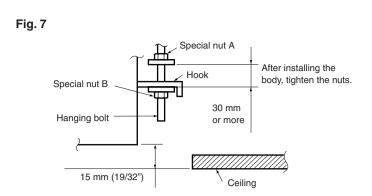
heat insulating pipe back on the

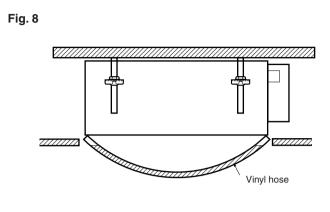
pipe, and secure it with tape.

3. Body installation

- (1) Install special nut A, then special nut B onto the hanging bolt. (Fig. 7) (2) Raise the body and mount its hooks onto the hanging bolt between
- the special nuts. (Fig. 7) (3) Turn special nut B to adjust the height of the body. (Fig. 7)
- (4) Leveling Using a level, or vinyl hose filled with water, fine adjust so that the body is level.

↑ WARNING Perform final tightening by tightening the double nut firmly.





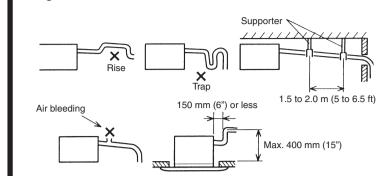
INSTALLING DRAIN PIPE

Note: Install the drain pipe.

- Install the drain pipe with downward gradient (1/50 to 1/100) and so there are no rises or traps in the pipe.
- minimize shock and vibration. Use general hard polyvinyl chloride pipe (VP25) [outside diameter 32
- mm (1-1/4")] and connect it with adhesive (polyvinyl chloride) so that
- When the pipe is long, install supporters.
- Do not perform air bleeding. Always heat insulate the indoor side of the drain pipe.

When desiring a high drain pipe height, raise it up to 400 mm (15") or

less from the ceiling within a range of 150 mm (6") from the body. A rise dimension over this range will cause leakage.



• 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 operation, install the drain pipe and connect it to an commercial 16 mm hose. (Heat & Cool model (Reverse cycle) only)

• Set the unit on a strong stand, such as one made of concrete blocks to

OUTDOOR UNIT

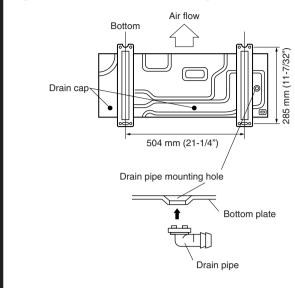
INSTALLATION

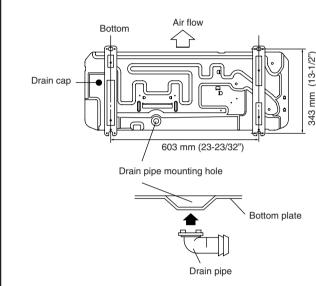
When installing the drain pipe, plug all the holes (• hole at one place or two places) other than the drain pipe mounting hole in the bottom of the outdoor unit with putty so there is no water leakage. (Fig. 10) (Heat & Cool model (Reverse cycle) only)

↑ CAUTION Installation in cold regions. Do not use the accessory drain pipe and drain cap. (If the drain pipe and drain cap are used, the drain water in

the pipe may freeze in extremely cold weather.)

[12000 and 14000 BTU/h models





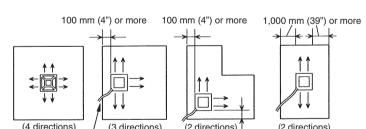
For authorized service personnel only

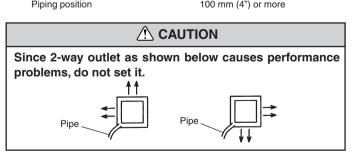
Z. WATHING
(1) For the air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.
(2) Connect the indoor unit and outdoor unit with the air conditioner piping and cords available from our standards parts. This installation instruction sheet describes the correct connections using the installation set available from our standard parts.

- After installation, explain correct operation to the customer, using the operating manual.

Especially, the installation place is very important for the split type air con-

Decide the mounting position together with the customer as follows: The discharge direction can be selected as shown below.

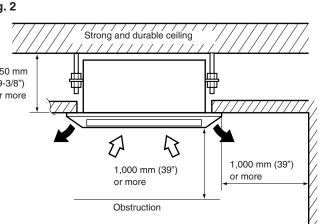




- withstands against the weight of the indoor unit.
- (4) The ceiling rear height is 250 mm (9-3/8") or more.

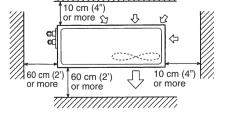
- (1) If possible, do not install the unit where it will exposed to direct sunlight. (If necessary, install a blind that does not interfere with the air
- or getting wet by rain as much as possible.
- (4) Do not place animals and plants in the path of the warm air.
- do not disturb neighbors. (7) Provide the space shown in Fig. 3 so that the air flow is not blocked.
- front, rear, and both sides. (8) During heating operation, drain water flows from the outdoor unit. Therefore, install the outdoor unit in a place where the drain water

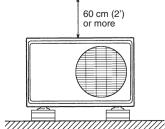
- (2) The inlet and outlet ports should not be obstructed; the air should be
- (6) A place from where drainage can be extracted outdoors easily.



_	
	⚠ WARNING
(1)	Install the unit where it will not be tilted by more than $5^{\circ}.$
(2)	When installing the outdoor unit where it may exposed to strong wind, fasten it securely.

- (2) Install the outdoor unit in a place where it will be free from being dirty
- (5) Take the air conditioner weight into account and select a place where noise and vibration are small. (6) Select a place so that the warm air and noise from the air conditioner
- Also for efficient operation, leave open three of the four directions





MODEL

Maximum length

(between indoor and outdoor)

verse cycle model only)

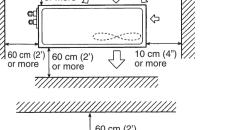
• Use pipe with water-resistant heat insulation.

Failure to do so may cause water leaks.

	⚠ WARNING			
•	Install the unit where it will not be tilted by more than 5°.			
•	When installing the outdoor unit where it may exposed to strong wind, fasten it securely			

- (3) Install the unit when connection to the indoor unit is easy.
- flow will not be obstructed. (Reverse cycle model only)

[12000 and 14000 BTU/h models]



80%, use heat insulation that is 20 mm or thicker. If heat insulation is used that is not as thick as specified, condensation may form on the surface of the insulation.

ELECTRICAL REQUIREMENT • Electric wire size and fuse capacity:

0.045 W/(m·K) or less (at 20 °C).

Table 3			
MODEL		12000 and 14000 BTU/h models	18000 BTU/h
Power supply cord	MAX.	3.0	3.0
(mm²)	MIN.	2.0	2.5
Connection cord	MAX.	2.5	2.5
(mm²)	MIN.	1.5	1.5

 Always use H07RN-F or equivalent to the connection cord. • Install the circuit breaker nearby the units. (Both indoor unit and outdoor unit)



CAUTION (1) Do not use mineral oil on flared part would reduce the lifetime of the units.

gas through them. (3) The maximum lengths of this product are shown in ta-

- (2) Hold the pipe downward so that cuttings will not enter the pipe and
- processing with a flare tool. Use the special R410A flare tool, or the conventional (for R22) flare

Check if [L] is flared uniformly

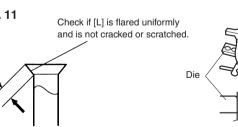
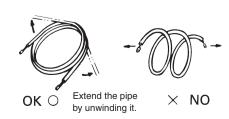


Table 4 Pine outside diameter

Table 4 Tipe datalae didiliotei						
		A (mm)				
oe outside liameter	Flare tool for	Conventional (R22) flare tool				
nameter	R410A, clutch type	Clutch type	Wing nut type			
mm (1/4 in.)	0 to 0.5	1.0 to 1.5	1.5 to 2.0			
mm (3/8 in.)	0 to 0.5	1.0 to 1.5	1.5 to 2.0			
mm (1/2 in.)	0 to 0.5	1.0 to 1.5	2.0 to 2.5			

2. Bending pipes

The pipes are snapped by your hands. Be careful not to collapse them.



Do not bend the pipes in an angle more than 90°. When pipes are repeatedly bent or stretched, the material will harden, making it difficult to bend or stretch them any more. Do not bend or stretch the pipes more than three times.

CONNECTING THE PIPING

/! WARNING Do not use the existing (for R22) piping and flare nuts. If the existing materials are used, the pressure inside the refrigerant cycle will rise and cause breakage, injury, etc.

(Use the special R410A materials.) Prevent mineral oil from getting into the system as this

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

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

operation can not be guaranteed.

- 1. FLARING (1) Cut the connection pipe to the necessary length with a pipe cutter.
- remove the burrs. (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

When using the conventional flare tool, always use an allowance adjustment gauge and secure the A dimension shown in table 4.

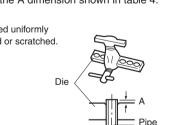


Table 4 1 ipo catolae alameter				
	A (mm)			
e outside iameter	Flare tool for	Conventional (R22) flare tool		
iailietei	R410A, clutch type	Clutch type	Wing nut type	
mm (1/4 in.)	0 to 0.5	1.0 to 1.5	1.5 to 2.0	
mm (3/8 in.)	0 to 0.5	1.0 to 1.5	1.5 to 2.0	
mm (1/2 in.)	0 to 0.5	1.0 to 1.5	2.0 to 2.5	

Table 5 Flare nut tightening torque

Flare nut	Tightening torque
6.35 mm (1/4 in.) dia.	14 to 18 N · m (140 to 180 kgf · cm)
9.52 mm (3/8 in.) dia.	33 to 42 N · m (330 to 420 kgf · cm)
12.70 mm (1/2 in.) dia.	50 to 62 N · m (500 to 620 kgf · cm)

⚠ CAUTION Be sure to connect the large pipe after connecting the small pipe completely.

3. Connection pipes (1) Indoor unit side Indoor unit

⚠ CAUTION

Bend the pipe with a radius of curvature of 150 mm or

(1) To prevent breaking of the pipe, avoid sharp bends.

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

0

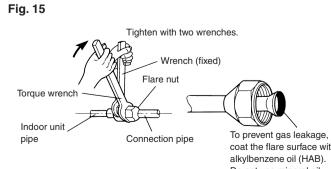
CAUTION (1) Be sure to apply the pipe against the port on the indoor unit correctly. If the centering is improper, the flare nut cannot be tightened smoothly. If the flare nut is

(2) Do not remove the flare nut from the indoor unit pipe unit immediately before connecting the connection

When the flare nut is tightened properly by your hand, hold the body side

coupling with a separate spanner, then tighten with a torque wrench. (Fig.

forced to turn, the threads will be damaged.



Do not remove the cap from the connection pipe before connecting

(2) Outdoor unit side Tighten the flare nut of the connection pipe at the outdoor unit valve

connector. The tightening method is the same as that as at the indoor

VACUUM PROCESS

⚠ CAUTION

(1) Do not purge the air with refrigerants but use a vacuum

(2) Use a vacuum pump for R410A exclusively. Using the

(1) Remove the cap, and connect the gauge manifold and the vacuum

(2) Vacuum the indoor unit and the connecting pipes until the pressure

(3) When -0.1 MPa (-76 cmHg) is reached, operate the vacuum pump

(4) Disconnect the service hoses and fit the cap to the charging valve to

(5) Remove the blank caps, and fully open the spindles of the 2-way and

(6) Tighten the blank caps of the 2-way valve and 3-way valve to the

Table 6

Blank cap 9.52 mm (3/8 in.) 20 to 25 N · m (200 to 250 kgf · cm)

(3-way valve) | 12.70 mm (1/2 in.) | 25 to 30 N · m (250 to 300 kgf · cm

Tightening torque 20 to 25 N · m (200 to 250 kgf · cm)

10 to 12 N · m (100 to 120 kgf · cm)

3-way valves with a hexagon wrench (Torque : 6 to 7 N ⋅ m (60 to 70

same vacuum pump for different refrigerants may dam-

frigerant in the outdoor unit for air purging!

age the vacuum pump or the unit.

pump to the charging valve by the service hoses.

gauge indicates -0.1 MPa (-76 cmHg).

1. VACUUM

for at least 15 minutes.

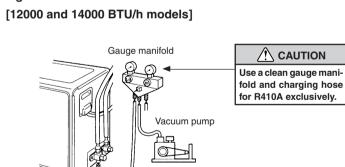
the specified torque.

specified torque.

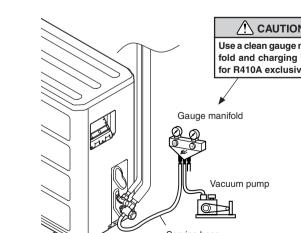
Blank cap (2-way valve)

pump to vacuum the installation! There is no extra re-

Hexagon wrench hexagon wrench. Service hose with valve core



[18000 BTU/h model]



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.

Pipe length Additional refrigerant	7.5 m (25 ft)	10 m (33 ft)	15 m (49 ft)	20 m (66 ft)	g/m (oz/ft)
12000 and 14000 BTU/h models	None	25 g (0.9 oz)	75 g (2.6 oz)	125 g (4.4 oz)	10 g/m (0.35 oz/3.3 ft)
18000 BTU/h model	None	50 g (1.8 oz)	150 g (5.3 oz)	250 g (8.8 oz)	20 g/m (0.71 oz/3.3 ft)

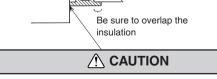
↑ CAUTION

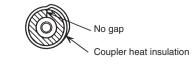
⚠ CAUTION Use a clean gauge mani fold and charging hose for R410A exclusively.

2. Additional charge

INSTALLING THE COUPLER HEAT INSULATION

Fig. 18



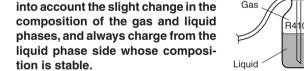


- Continued on back -

⚠ CAUTION (1) When moving and installing the air conditioner, do not

(3) When charging the refrigerant, take

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



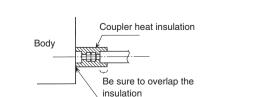
(4) Add refrigerant from the charging valve after the completion of the work. (5) If the units are further apart than the maximum pipe

length, correct operation can not be guaranteed.

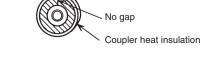
3. GAS LEAKAGE INSPECTION

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

After checking for gas leaks, insulate by wrapping insulation around the two parts (large and small) of the indoor unit coupling, using the coupler



Must fit tightly against body without any gap.



the insulation to about 25 mm (15/16") of expose the solid wire.

(2) 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 terminal screw.

(4) 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

1. Indoor unit side

the insulation to about 10 mm (3/8") of expose the strand wiring. (2) Using a screwdriver, remove the terminal screw(s) on the terminal

⚠ WARNING 1) Before starting work, check that power is not being sup-

2) Match the terminal board numbers and connection cord

Erroneous wiring may cause burning of the electric

(3) Connect the connection cords firmly to the terminal

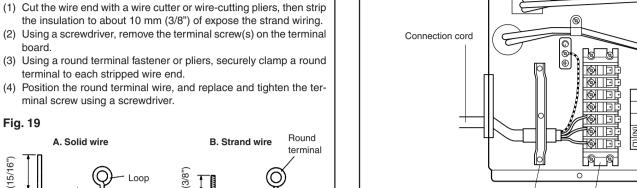
4) Always fasten the outside covering of the connection

cord with the cord clamp. (If the insulator is chafed,

board. Imperfect installation may cause a fire.

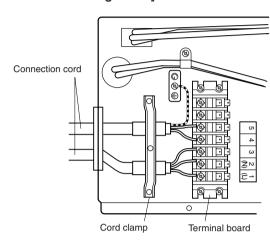
plied to indoor unit and the outdoor unit.

colors with those of the outdoor unit side.



[18000 BTU/h Cooling model]

[12000 and 14000 BTU/h Cooling models]



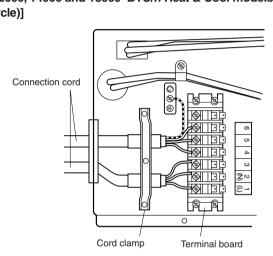
(1) Remove the control box cover and install the connection cord.

Control box cover

(Figs. 20 and 21)

Fig. 20

[12000, 14000 and 18000 BTU/h Heat & Cool models (Reverse cycle)]



2. Outdoor unit side

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

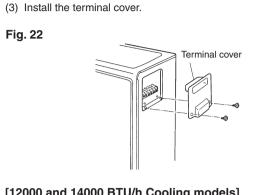
2) Match the terminal board numbers and connection cord colors with those of the indoor unit side. Erroneous wiring may cause burning of the electric

(3) Connect the connection cords and the power supply cord firmly to the terminal board. Imperfect installation may cause a fire.

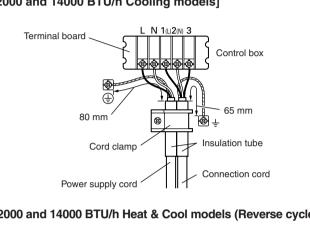
(4) Always fasten the outside covering of the connection cord and the power supply cord with cord clamps. (If the insulator is chafed, electric leakage may occur.)

(5) Always connect the ground wire.

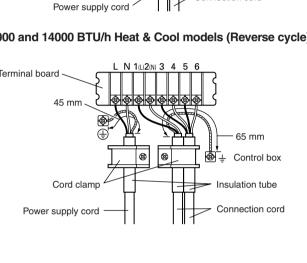
(1) Remove the terminal cover of the outdoor unit, and insert the end of the connection cord and the power supply cord into the terminal board. (2) Fasten the connection cord and the power supply cord with the cord



[12000 and 14000 BTU/h Cooling models]



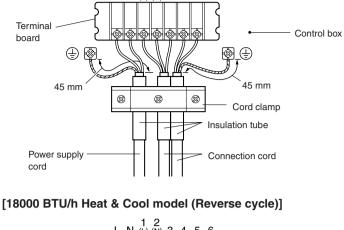
[12000 and 14000 BTU/h Heat & Cool models (Reverse cycle)]

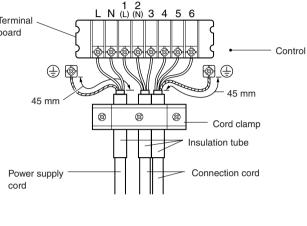


2. SWITCHING REMOTE CONTROL UNIT SIGNAL

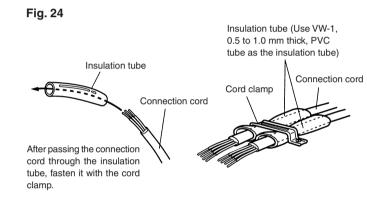
Fig. 23 Terminal cover

[18000 BTU/h Cooling model]





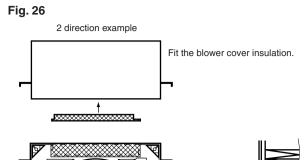
CAUTION When routing the ground wires, leave slack as shown in the illustrations.

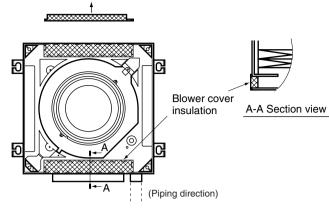


GRILLE INSTALLATION

1. Blower cover insulation

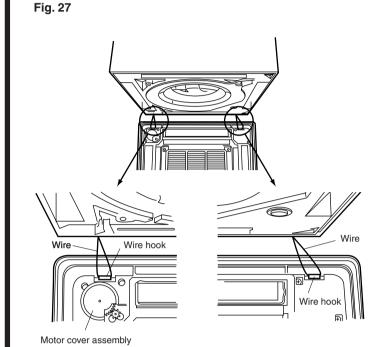
Install the blower cover insulation only when the outlet direction is not Two blower cover insulations are packed with the grille assembly. Install the blower cover insulation at the diffuser position shown in Fig. 26. At the time, use the piping position as the criteria.





2. Installing grille assembly to body

Hang the grille assembly on the wires attached to the indoor unit as shown



Install the grille assembly to the body with the four bolts, spring washers, and washers. Fig. 28 No gap between ceiling and grille around entire periphery.

Wireless unit connection wire wiring

Bolting the grille assembly to the body

Connect the connector in accordance part A detail view. Then clamp the lead wire with clamp so that it does not touch the rotating

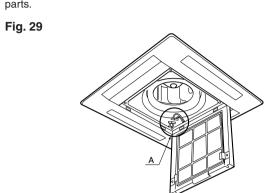
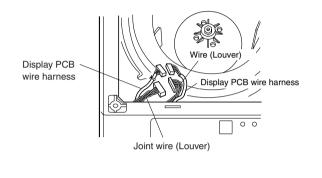
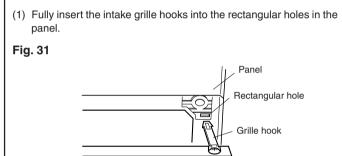


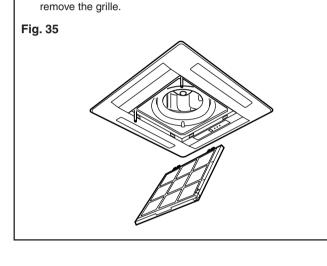
Fig. 30 Part A detail view



INSTALLING/REMOVING THE INTAKE GRILLE . Installing the intake grille



Intake grille



(3) Open the intake grille so that it is at an angle of 20° to 40°, then

(2) Close the intake grille, then slide the two grille stoppers outward.

(1) Slide the two grille stoppers inward, then open the intake grille.

(2) Remove the grille hook screws, then open the intake grille.

2. Removing the intake grille

Fig. 33

⚠ CAUTION (1) The louver angle cannot be changed if the power is not on, (If moved by hand, it may be damaged.)

(2) The grille assembly is directional relative to the air con-

ditioner body.

(3) Install so that there is no gap between the grille assembly and the air conditioner body.

POWER

the 198 V to 264 V range.

electric leakage may occur.)

(5) Always connect the ground wire.

⚠ WARNING

(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

(3) Always use a special branch circuit and install a special breaker to supply power to the air conditioner.

conditioner. (Install in accordance with standard) (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

mm between the contacts of each pole.

(4) Use a circuit breaker matched to the capacity of the air

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

(7) Install a leakage circuit breaker in accordance with the related laws and regulations and electric company standards.

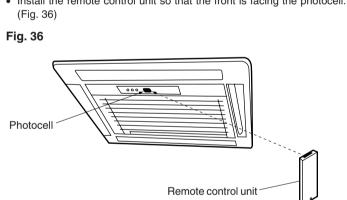
↑ CAUTION

(1) The power source capacity must be the sum of the air conditioner current and the current of other electrical appliances. When the current contracted capacity is insufficient, change the contracted capacity.

(2) When the voltage is low and the air conditioner is difficult to start, contact the power company the voltage

(3) This air conditioner must be connected to a power source that has an electrical impedance of 0.25 Ω or less or has a supply current of 100 A or greater. If the power supply does not meet the specifications, contact the power company.

INSTALLATION



• Install the remote control unit with a distance of 5 m between the remote control unit and the grille photocell as the criteria. However, when installing the remote control unit, check that it operates

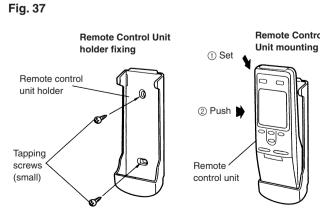
↑ CAUTION

control unit holder.

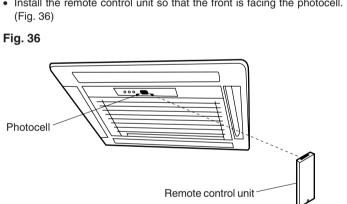
paying careful attention to the following: Avoid places in direct sunlight. a stove, etc.

INSTALLATION

• Install the remote control unit holder to a wall, pillar, etc. with the tapping screws.



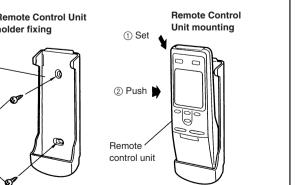
REMOTE CONTROL UNIT



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

2) Select the remote control unit holder selection site by Select a place that will not be affected by the heat from

I. REMOTE CONTROL UNIT HOLDER



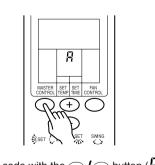
Install the remote control unit so that the front is facing the photocell.

 Air conditioner settings - Indoor unit Printed circuit board Remote control unit settings (1) Press the START/STOP button and display only the clock.

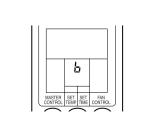
CODES

Fig. 39 81:5i

(2) Press the MASTER CONTROL button continuously for more than five seconds to display the current signal code.



(3) Change the signal code with the \bigcirc / \bigcirc button (\nearrow \rightarrow \bigcirc \rightarrow \bigcirc). Fig. 41



(4) Press the MASTER CONTROL button again to return to the clock display and change the signal code.

Confirm the setting of the remote control unit signal code and the printed circuit board setting. If these are not confirmed, the remote control unit cannot be used to operate for the air conditioner.

Table 6				
Jumper wire		Remote control unit		
JM2	JM3	signal code		
onnect	Connect	A (Primary setting)		
onnect	Disconnect	В		
connect	Connect	С		
connect	Disconnect	D		

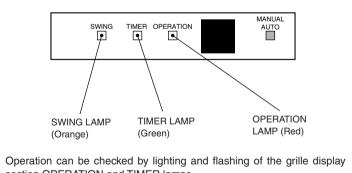
TEST RUNNING

Perform test operation and check items 1 and 2 below

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

the battery compartment lid and send the 'TEST RUN' signal from the remote control unit). Fig. 42 Short the two metal contacts under the battery compartment lid.

• To end test operation, press the remote control unit START/STOP but-(When the air conditioner is run by pressing the remote control unit TEST RUN button, the OPERATION and TIMER lamps will simultaneously flash slowly.)



section OPERATION and TIMER lamps. Perform judgment in accordance with the following.

When the air conditioner is run by pressing the remote control unit test

run button, the OPERATION and TIMER lamps flash slowly at the same

The OPERATION, TIMER and SWING lamps operate as follows

(Table 9) according to the error contents. Table 9 Error display

OPERATION TIMER SWING

lamp	lamp	lamp		
Blinks	Blinks	Goes off	Model information abnormal (permanent type)	
Pulses 4 times	Blinks	Goes off	Drain abnormal (permanent type)	
Pulses 6 times	Blinks	Goes off	Indoor fan abnormal	
Pulses 2 times	Blinks	Goes off	Room air temperature thermistor open circuit	
		Blinks	Room air temperature thermistor short circuit	
Pulses 3 times	Blinks	Goes off	Piping thermistor open circuit	
		Blinks	Piping thermistor short circuit	

CHECK ITEMS

(1) INDOOR UNIT (1) Is operation of each button on the remote control unit normal?

(2) Does each lamp light normally?

(3) Do not air flow direction louvers operate normally? (4) Is the drain normal? (5) Is there any abnormal noise and vibration during operation?

(2) OUTDOOR UNIT

[12000 and 14000 BTU/h Cooling models]

Indoor unit

side terminal

[18000 BTU/h Cooling model]

side terminal

÷⊗

Indoor unit

side terminal

Green/Yellow

[12000,14000 and 18000 BTU/h Heat & Cool models (Reverse

Green/Yellow

⊗ EARTH⊕

-⊗ EARTH -

- EARTH⊕

-⊗ EARTH <u>+</u>

–⊗ EARTH 🖶

-⊗ EARTH<u>+</u>

Outdoor unit

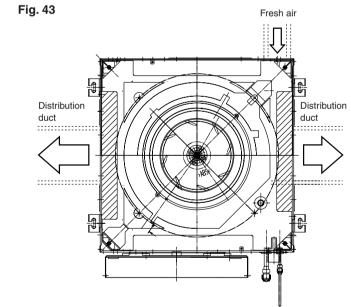
Outdoor unit

side terminal

(1) Is there any abnormal noise and vibration during operation? (2) Will noise, wind or drain water from the unit disturb the neighbors? (3) Is there any gas leakage?

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

OPENING THE DUCT CONNECTION HOLE



(1) When performing hole opening work, be careful not to damage the drain pan. (2) When connecting the distribution duct, to make the air

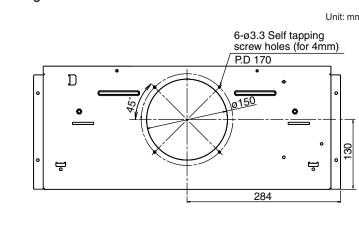
CAUTION

flow easily, block the outlet port with the blower cover insulation as shown by the hatched lines in Fig. 43. For the blocking direction, refer to Fig. 26. 1. DIMENSION

(1) Fresh air duct connection hole and screw positions.

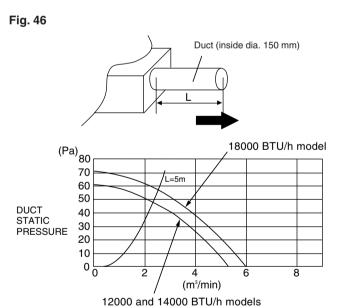
Unit: mm

(2) Distribution duct connection hole and screw positions.

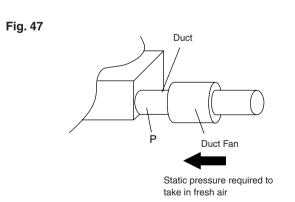


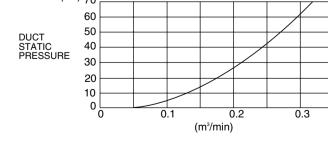
CAUTION The air conditioner cannot take in fresh air by itself. When connecting a fresh air duct, always use a duct fan.

OUTLET AIR



FRESH AIR





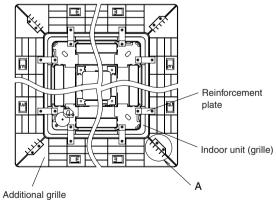
INSTALLING THE OPTION PARTS (ADDITIONAL GRILLE)

THE ADDITIONAL GRILLE • Mount the assembled additional grille to the indoor unit (grille) that has

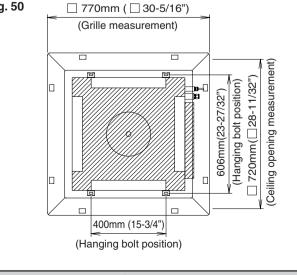
been removed from the main unit. • Make sure all areas are properly installed the reinforcement plate.

 Mount 4 additional grilles. (Fig. 49) After confirming proper meshing of the additional grilles, secure them in place using the 8 screws provided.

Fig. 49 Illustration of completed mounting



POSITION THE CEILING HOLE AND HANGING BOLTS



⚠ CAUTION When installing the additional grille, please refer to the installation instruction sheet supplied with the additional

PART NO. 9359992097