INSTALLATION INSTRUCTIONS
– Single Split Air Conditioner –

Panasonic®

This air conditioner uses the refrigerant R410A.

■ **R410A Models**

Model No.

Indoor Units			
Type	Indoor Unit Type	Nominal Capacity	
		26	36
F2	Low Silhouette Ducted	S-26PF2U6	S-36PF2U6

Read through the Installation Instructions before you proceed with the installation.
In particular, you will need to read under the “IMPORTANT!” section at the top of the page.

IMPORTANT!
Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- This air conditioner shall be installed in accordance with National Wiring Regulations.
- Pay close attention to all warning and caution notices given in this manual.

WARNING This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

CAUTION This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

WARNING **When Wiring**

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause **accidental injury or death**.
- **Ground the unit** following local electrical codes.
- Connect all wiring tightly. Loose wiring may cause over-heating at connection points and a possible fire hazard.
- To prevent possible hazards from insulation failure, the unit must be grounded.

- This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing…

Select an installation location which is rigid and strong enough to support or hold the unit, and select a location for easy maintenance.

…In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

CAUTION Keep the fire alarm and the air outlet at least 5 feet (1.5 m) away from the unit.

…In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

…In an Area with High Winds

Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

…In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing

- Ventilate the room well, in the event that is refrigerant gas leaks during the installation. Be careful not to allow contact of the refrigerant gas with a flame as this will cause the generation of poisonous gas.
- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

WARNING

- When performing piping work do not mix air except for specified refrigerant (R410A) in refrigeration cycle. It causes capacity down, and risk of explosion and injury due to high tension inside the refrigerant cycle.
- Check for a leaking refrigerant! Refrigerant gas may produce a toxic gas if it comes in contact with fire.
- Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.

- Do not leak refrigerant while piping work for an installation or re-installation, and while repairing refrigeration parts.
  Handle liquid refrigerant carefully as it may cause frostbite.

When Servicing

- Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.

WARNING

- This product must not be modified or disassembled under any circumstances. Modified or disassembled unit may cause fire, electric shock or injury.
- Do not clean inside the indoor and outdoor units by users. Engage authorized dealer or specialist for cleaning.
- In case of malfunction of this appliance, do not repair by yourself. Contact to the sales dealer or service dealer for a repair.

CAUTION

- Do not touch the air inlet or the sharp aluminum fins of the outdoor unit. You may get injured.
- Ventilate any enclosed areas when installing or testing the refrigeration system. Escaped refrigerant gas, on contact with fire or heat, can produce dangerously toxic gas.
- Confirm after installation that no refrigerant gas is leaking. If the gas comes in contact with a burning stove, gas water heater, electric room heater or other heat source, it can cause the generation of poisonous gas.

Others

WARNING

- Do not sit or step on the unit, you may fall down accidentally.

CAUTION

- Do not touch the air inlet or the sharp aluminum fins of the outdoor unit.
  You may get injured.
- Do not stick any object into the FAN CASE.
  You may be injured and the unit may be damaged.

Check of Density Limit

The room in which the air conditioner is to be installed requires a design that in the event of refrigerant gas leaking out, its density will not exceed a set limit.

The refrigerant (R410A), which is used in the air conditioner, is safe, without the toxicity or combustibility of ammonia, and is not restricted by laws imposed to protect the ozone layer. However, since it contains more than air, it poses the risk of suffocation if its density should rise excessively. Suffocation from leakage of refrigerant is almost non-existent. With the recent increase in the number of high density buildings, however, the installation of multi air conditioner systems is on the increase because of the need for effective use of floor space, individual control, energy conservation by curtailing heat and carrying power, etc.

Most importantly, the multi air conditioner system is able to replenish a large amount of refrigerant compared to conventional individual air conditioners.

If a single unit of the multi air conditioner system is to be installed in a small room, select a suitable model and installation procedure so that if the refrigerant accidentally leaks out, its density does not reach the limit (and in the event of an emergency, measures can be made before injury can occur).

ASHRAE and the International Mechanical Code of the ICC as well as CSA provide guidance and define safeguards related to the use of refrigerants, all of which define a Refrigerant Concentration Level (RCL) of 25 pounds (11.3 kg) per 1,000 cubic feet (28.3 m^3) for R410A refrigerant.

For additional guidance and precautions related to refrigerant safety, please refer to the following documents:

International Mechanical Code 2012 (IMC-2012)
(or more recently revised)
ASHRAE 15
ASHRAE 34

CONTENTS

1. GENERAL

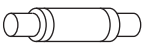
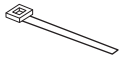
This booklet briefly outlines where and how to install the air conditioning system. Please read over the entire set of instructions for the indoor and outdoor units and make sure all accessory parts listed are with the system before beginning.

1-1. Tools Required for Installation (not supplied)

1. Flathead screwdriver
2. Phillips head screwdriver
3. Knife or wire stripper
4. Tape measure
5. Carpenter's level
6. Sabre saw or keyhole saw
7. Hacksaw
8. Core bits
9. Hammer
10. Drill
11. Tube cutter
12. Tube flaring tool
13. Torque wrench
14. Adjustable wrench
15. Reamer (for deburring)

1-2. Accessories Supplied with Unit

Table 1-1 (Low Silhouette Ducted)

Part Name	Figure	Q'ty	Remarks
Washer		8	For suspending indoor unit from ceiling
Flare insulator		2	For gas and liquid tubes
Insulating tape		2	For gas and liquid tubes flare nuts
Drain insulator		1	For drain hose joint
Hose band		1	For securing drain hose
Packing		1	For drain hose joint (hard material)
Packing		1	For drain hose joint (soft material)
Drain hose		1	
Operating Instructions		1	
Installation Instructions		1	
Warranty card		1	
Band		1	For inter-unit control wiring
Short-circuit connection		1	For high static pressure (Located on the back of the electrical component box lid.)

- Use 3/8" (M10) for hanging bolts.
- Field supply for hanging bolts and nuts.

1-3. Type of Copper Tube and Insulation Material

If you wish to purchase these materials separately from a local source, you will need:

1. Deoxidized annealed copper tube for refrigerant tubing.
2. Foamed polyethylene insulation for copper tubes as required to precise length of tubing. Wall thickness of the insulation should be not less than 5/16"(8 mm).
3. Use insulated copper wire for field wiring. Wire size varies with the total length of wiring. Refer to 4. ELECTRICAL WIRING for details.

CAUTION

Check local electrical codes and regulations before obtaining wire. Also, check any specified instructions or limitations.

1-4. Additional Materials Required for Installation

1. Refrigeration (armored) tape
2. Insulated staples or clamps for connecting wire (See your local codes.)
3. Putty
4. Refrigeration tubing lubricant
5. Clamps or saddles to secure refrigerant tubing
6. Scale for weighing

2. SELECTING THE INSTALLATION SITE

2-1. Indoor Unit

AVOID:

- areas where leakage of flammable gas may be expected.
- places where large amounts of oil mist exist.
- direct sunlight.
- locations near heat sources which may affect the performance of the unit.
- locations where external air may enter the room directly.
  This may cause “condensation” on the air discharge ports, causing them to spray or drip water.
- locations where the remote controller will be splashed with water or affected by dampness or humidity.
- installing the remote controller behind curtains or furniture.
- locations where high-frequency emissions are generated.

DO:

- select an appropriate position from which every corner of the room can be uniformly cooled.
- select a location where the ceiling is strong enough to support the weight of the unit.
- select a location where tubing and drain pipe have the shortest run to the outdoor unit.
- allow room for operation and maintenance as well as unrestricted air flow around the unit.
- install the unit within the maximum elevation difference above or below the outdoor unit and within a total tubing length (L) from the outdoor unit as detailed in the installation manual packed with the outdoor unit.
- allow room for mounting the remote controller about 3.3 ft. (1 m) off the floor, in an area that is not in direct sunlight or in the flow of cool air from the indoor unit.
- If the indoor unit is installed on the ceiling where the temperature or humidity inside is high (over 86°F(30°C)/RH: 70%), add insulating material to the surface of the unit to avoid dew condensation.

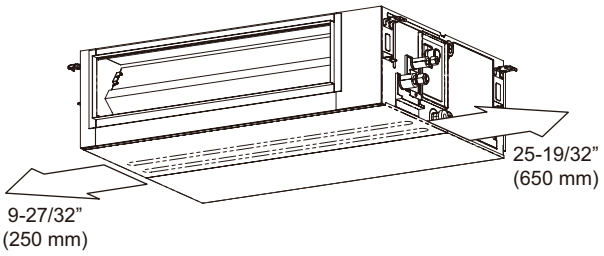


Fig. 2-1

3. HOW TO INSTALL THE INDOOR UNIT

■ Low Silhouette Ducted Type (F2 Type)

3-1. Required Minimum Space for Installation and Service

- The minimum space for installation and service is shown in Fig. 3-1 and Table 3-1.
- Space between the unit and the ceiling should be more than 3/4" (19.05 mm). (Fig. 3-1)

Table 3-1 Unit: inch (mm)

Type	26	36
A (Length)	42-1/64 (1,067)	57-3/4 (1,467)

- It is recommended that space be provided (23-5/8" × 23-5/8") (600 × 600 mm) for checking and servicing the electrical system.
- The detailed dimensions of the indoor unit is shown in Fig. 3-2 and Table 3-2.

Unit: inch (mm)

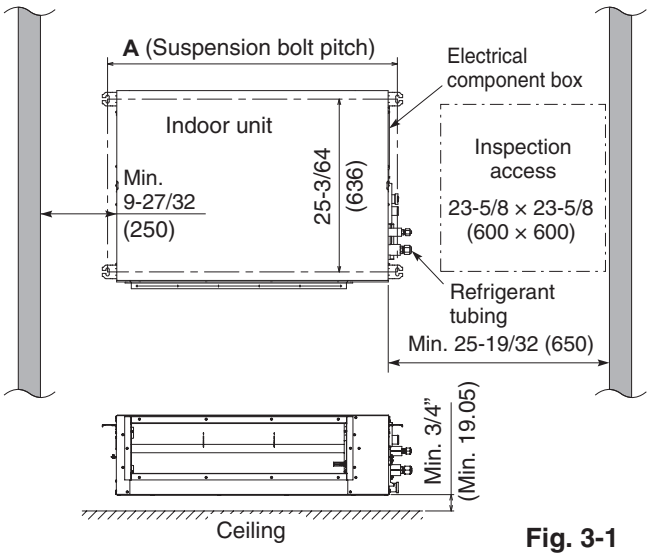


Fig. 3-1

Table 3-2

Type		A	B	C	D	E	F
26	inch	42-1/64	39-3/8	29-17/32 (Pitch 5-29/32 × 5)	53/64	31-3/16	16
	mm	1,067	1,000	750 (Pitch 150 × 5)	21	792	
36	inch	57-3/4	55-1/8	41-11/32 (Pitch 5-29/32 × 7)	2-51/64	46-59/64	20
	mm	1,467	1,400	1,050 (Pitch 150 × 7)	71	1,192	

Unit: inch (mm)

a) Refrigerant tubing joint (liquid tube)
b) Refrigerant tubing joint (gas tube)
c) Upper drain port VP25 (O.D. 1-17/64" (O.D. 32 mm)) ℓ 7-7/8" (200 mm) flexible hose supplied
d) Bottom drain port VP25 (O.D. 1-17/64" (O.D. 32 mm))
e) Suspension lug (4 – 15/32" × 1-3/16" (4 – 12 × 30 mm))
f) Inter-unit control wiring port
g) Fresh air intake port (ø5-29/32" (ø150 mm))
h) Flange for flexible air outlet duct
i) Electrical component box
j) Power supply wiring port

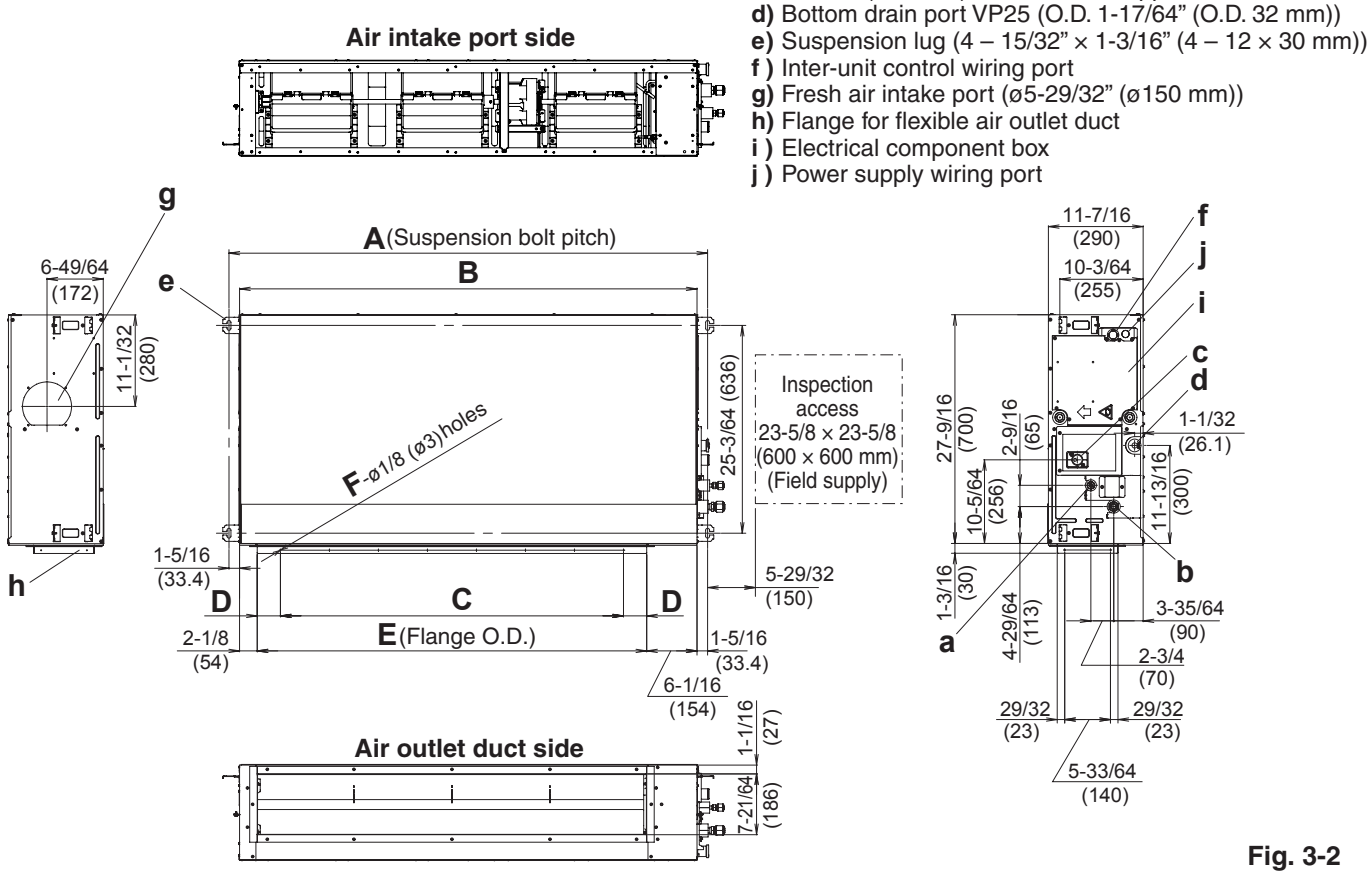


Fig. 3-2

3-2. Suspending the Indoor Unit

Depending on the ceiling type:

- Insert suspension bolts (Fig. 3-3)
  or
- Use existing ceiling supports or construct a suitable support (Fig. 3-4).

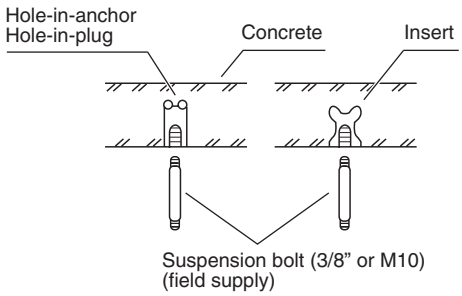


Fig. 3-3

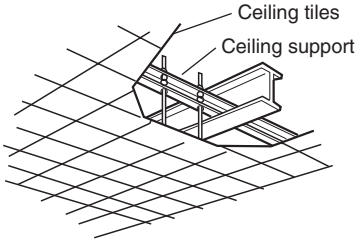


Fig. 3-4

WARNING

It is important that you use extreme care in supporting the indoor unit inside the ceiling. Ensure that the ceiling is strong enough to support the weight of the unit. Before hanging the unit, test the strength of each attached suspension bolt.

(1) When placing the unit inside the ceiling, determine the pitch of the suspension bolts referring to the dimensional data as shown in Fig. 3-1 and Table 3-2.
Tubing must be laid and connected inside the ceiling when suspending the unit. If the ceiling is already constructed, lay the tubing into position for connection to the unit before placing the unit inside the ceiling.

(2) Screw in the suspension bolts allowing them to protrude from the ceiling (Fig. 3-3). (Cut the ceiling material, if necessary.)

(3) Thread the 3 hexagonal nuts and 2 washers (field supply) onto each of the 4 suspension bolts (Figs. 3-5 and 3-6). Use 1 nut and 1 washer for the upper part, and 2 nuts and 1 washer for the lower part, so that the unit will not fall off the suspension lugs.

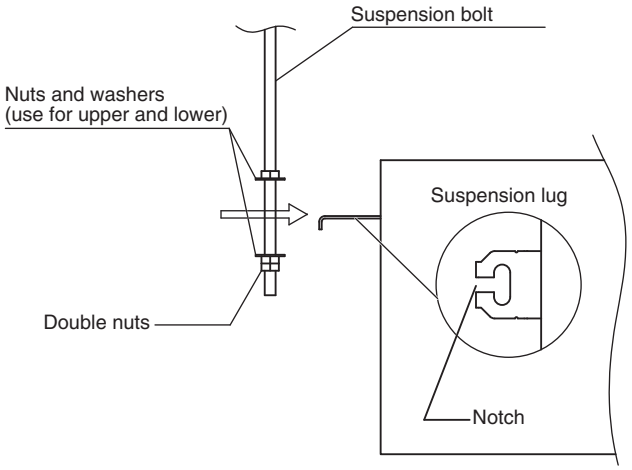


Fig. 3-5

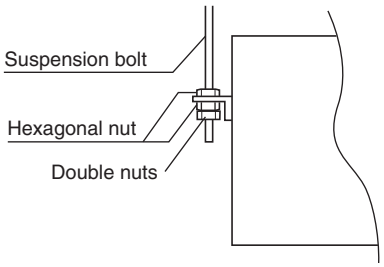


Fig. 3-6

- This shows an example of installation.

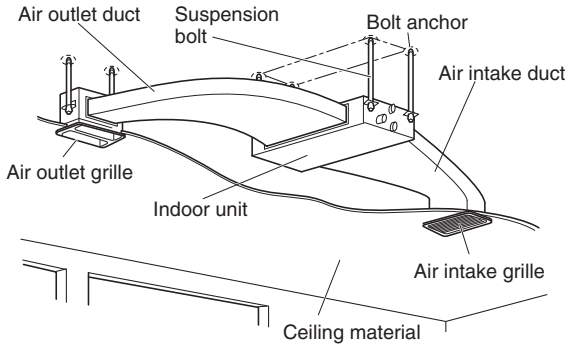


Fig. 3-7

3-3. Installing the Drain Pipe

(1) Prepare standard hard PVC pipe (O.D. 1-17/64" (O.D. 32 mm)) for the drain and use the supplied hose band to prevent water leaks.
The PVC pipe must be purchased separately.
The transparent drain part on the unit allows you to check drainage. (Fig. 3-8)

CAUTION

- **Do not use adhesive tape at the drain connection port on the indoor unit.**
- **Insert the drain pipe until it contacts the socket, and then secure it tightly with the hose band.**
- **Do not use the supplied drain hose bent at a 90° angle. (The maximum permissible bend is 45°.)**

● **Tighten the hose clamps so their locking nuts face upward. (Fig. 3-8)**

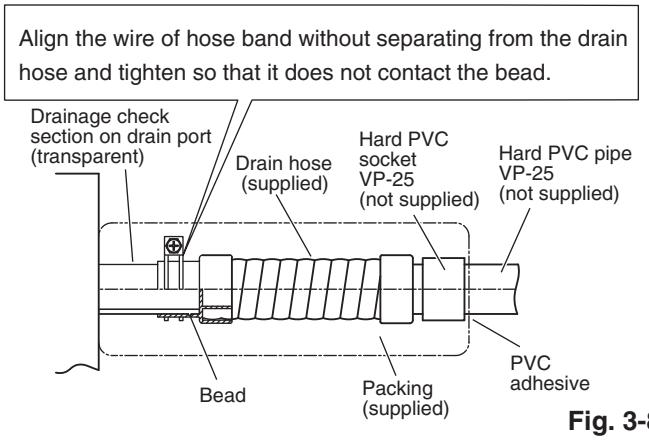


Fig. 3-8

(2) After connecting the drain pipe securely, wrap the supplied packing and drain pipe insulator around the pipe, then secure it with the vinyl clamps. (Fig. 3-9)

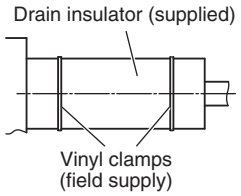


Fig. 3-9

NOTE

Make sure the drain pipe has a downward slant (1/100 or more) and that there are no water traps.

CAUTION

● **Do not install an air bleeder as this may cause water to spray from the drain pipe outlet. (Fig. 3-10)**

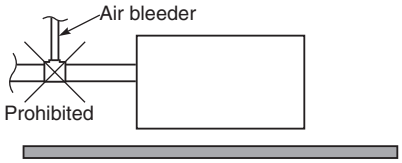


Fig. 3-10

● **If it is necessary to increase the height of the drain pipe, the section directly after the connection port can be raised a maximum of 1.64 ft. (500 mm). Do not raise it any higher than 1.64 ft. (500 mm), as this could result in water leaks. (Fig. 3-11)**

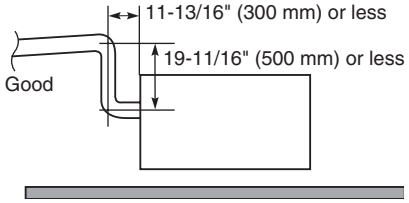


Fig. 3-11

● Do not install the pipe with an upward slant from the connection port. This will cause the drain water to flow backward and leak when the unit is not operating. (Fig. 3-12)

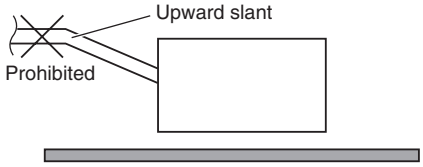


Fig. 3-12

● Do not apply force to the piping on the unit side when connecting the drain pipe. The pipe should not be allowed to hang unsupported from its connection to the unit. Fasten the pipe to a wall, frame, or other support as close to the unit as possible. (Fig. 3-13)

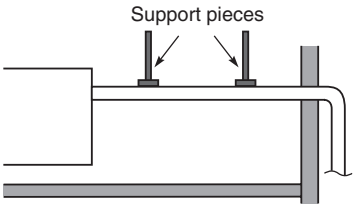
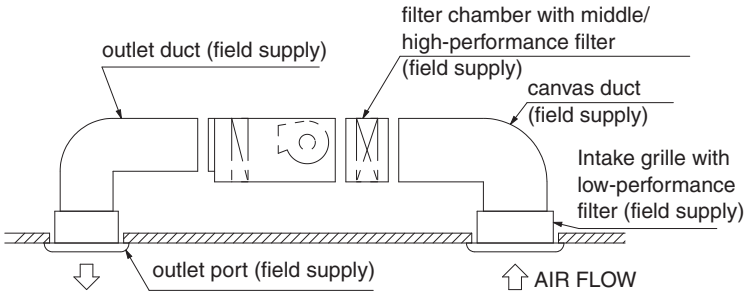
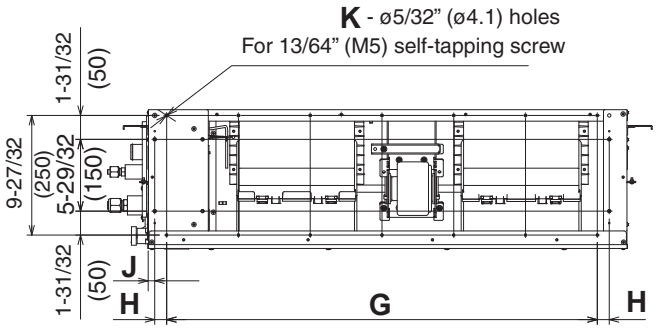


Fig. 3-13

3-4. Connecting Duct



(1) Install the duct (field supply) to air intake port side.
See the figure for the dimension of the installation hole.
Use M5 self-tapping screws for installation.
(Fig. 3-14)



NOTE

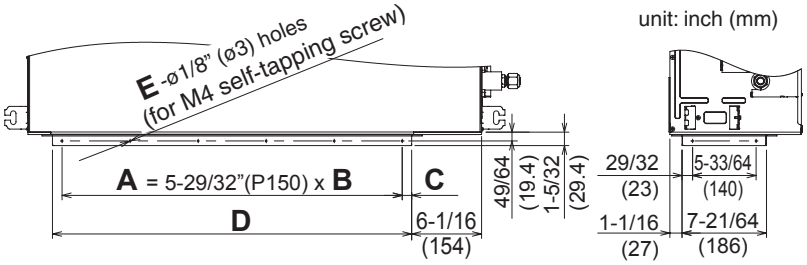
- To get clean air and to extend the service life of the air conditioner, an air filter must be installed in the air intake.
  For installation and cleaning the air filter, consult your dealer or service center.

Type		G	H	J	K
26	inch	35-7/16 (Pitch 5-29/32 × 6)	63/64	33/64	18
	mm	900 (Pitch 150 × 6)	25	13	
36	inch	53-5/32 (Pitch 5-29/32 × 9)	0	33/64	24
	mm	1,350 (Pitch 150 × 9)	0	13	

Fig. 3-14

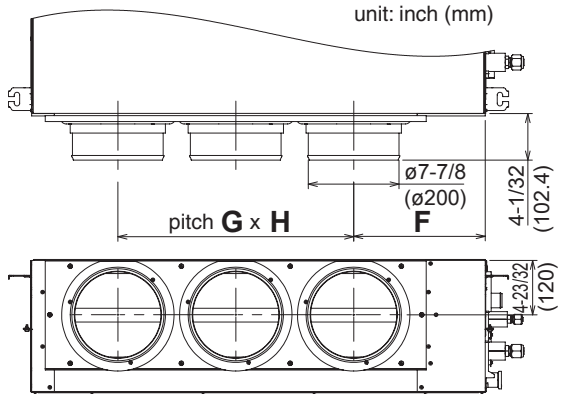
(2) Install the duct (field supply) to air outlet port side.

- Connection to the duct flange (supplied)
  See the figure for the dimension of the installation hole.
  Use M4 self-tapping screws for installation.



Type		A	B	C	D	E
26	inch	29-17/32	5	53/64	31-3/16	16
	mm	750		21	792	
36	inch	41-11/32	7	2-51/64	46-59/64	20
	mm	1050		71	1192	

- Connection to the duct flange (optional)
  See the figure for the dimension of the installation hole.



Type		F	G	H
26	inch	11-7/16	10-15/64	2
	mm	290	260	
36	inch	12-13/32	11-7/16	3
	mm	315	290	

4. ELECTRICAL WIRING

4-1. General Precautions on Wiring

(1) Before wiring, confirm the rated voltage of the unit as shown on its nameplate, then carry out the wiring closely following the wiring diagram.

WARNING

(2) This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.
Earth Leakage Circuit Breaker (ELCB) must be incorporated in the fixed wiring in accordance with the wiring regulations. The Earth Leakage Circuit Breaker (ELCB) must be an approved 15 A, having a contact separation in all poles.

(3) To prevent possible hazards from insulation failure, the unit must be grounded.

(4) Each wiring connection must be done in accordance with the wiring system diagram. Wrong wiring may cause the unit to misoperate or become damaged.

(5) Do not allow wiring to touch the refrigerant tubing, compressor, or any moving parts of the fan.

(6) Unauthorized changes in the internal wiring can be very dangerous. The manufacturer will accept no responsibility for any damage or misoperation that occurs as a result of such unauthorized changes.

(7) Regulations on wire diameters differ from locality to locality. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning.
You must ensure that installation complies with all relevant rules and regulations.

(8) To prevent malfunction of the air conditioner caused by electrical noise, care must be taken when wiring as follows:

- The remote control wiring and the inter-unit control wiring should be wired apart from the inter-unit power wiring.
- Use shielded wires for inter-unit control wiring between units and ground the shield on single side.

(9) If the power supply cord of this appliance is damaged, it must be replaced by a repair shop designated by the manufacturer, because special-purpose tools are required.

4-2. Recommended Wire Length and Wire Diameter for Power Supply System

Indoor unit

Type	Time delay fuse or circuit capacity
F2	15 A

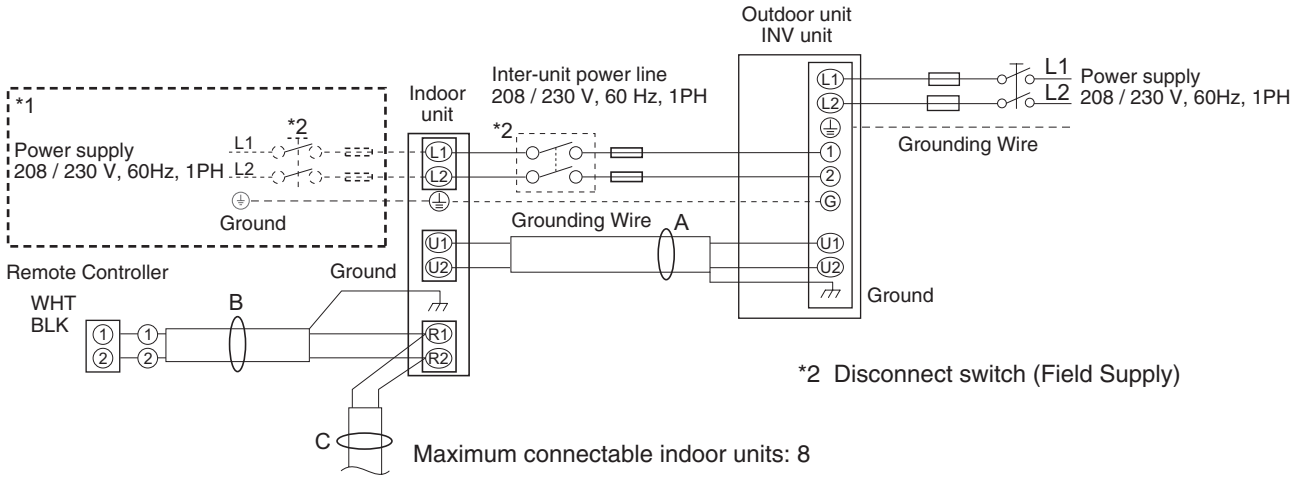
Control wiring

(A) Inter-unit control wiring (between outdoor and indoor units)	(B) Remote control wiring	(C) Control wiring for group control
AWG #18 ($0.75\ mm^2$) **Use shielded wiring***	AWG #18 ($0.75\ mm^2$) **Use shielded wiring***	AWG #18 ($0.75\ mm^2$) **Use shielded wiring***
Max. 3,280 ft. (Max. 1,000 m)	Max. 1,640 ft. (Max. 500 m)	Max. 650 ft. (Total) (Max. 200 m (Total))

NOTE

* With ring-type wire terminal.

4-3. Wiring System Diagrams



NOTE

* 1 When the power source is not supplied from the outdoor unit via the inter-unit power line, provide external power source in the indoor unit.

* 2 Disconnect Switch may be needed by the National/Local code.

ALWAYS COMPLY WITH NATIONAL AND LOCAL CODE REQUIREMENTS.

Fig. 4-1

NOTE

(1) Refer to Section “4-2. Recommended Wire Length and Wire Diameter for Power Supply System” for the explanation of “A”, “B” and “C” in the above diagram.

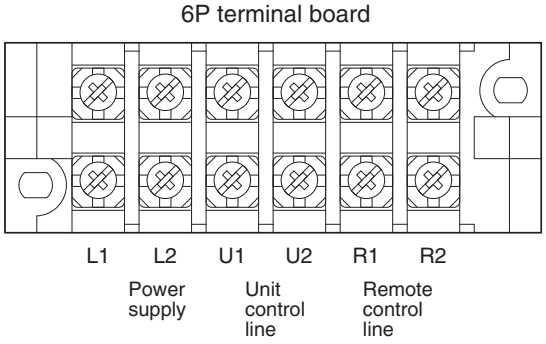
(2) The basic connection diagram of the indoor unit shows the 6P terminal board, so the terminal boards in your equipment may differ from the diagram.

(3) Refrigerant Circuit (R.C.) address should be set before turning the power on.

(4) Regarding R.C. address setting, refer to the installation instructions supplied with the remote controller unit (optional). Auto address setting can be executed by remote controller automatically. Refer to the installation instructions supplied with the remote controller unit (optional).

(5) Ensure that the ground shield cable for inter-unit control wiring between outdoor and indoor units should be connected to the outdoor unit.

(6) Ensure that the ground shield cable for a remote controller should be connected only to the indoor unit.



F2 Type

Fig. 4-2

CAUTION

Loose wiring may cause the terminal to overheat or result in unit malfunction.
A fire hazard may also occur.
Therefore, ensure that all wiring is tightly connected.

When connecting each power wire to the terminal, follow the instructions on “How to connect wiring to the terminal” and fasten the wire securely with the fixing screw of the terminal board.

How to connect wiring to the terminal

■ For stranded wiring

(1) Cut the wire end with cutting pliers, then strip the insulation to expose the stranded wiring approx. 3/8 inch (10 mm) and tightly twist the wire ends. (Fig. 4-3)
(2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal board.
(3) Using a ring connector fastener or pliers, securely clamp each stripped wire end with a ring pressure terminal.
(4) Place the ring pressure terminal, and replace and tighten the removed terminal screw using a screwdriver. (Fig. 4-4)

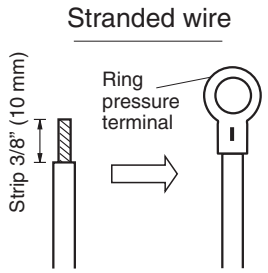


Fig. 4-3

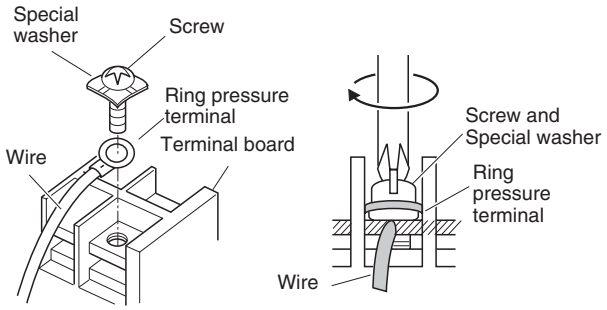
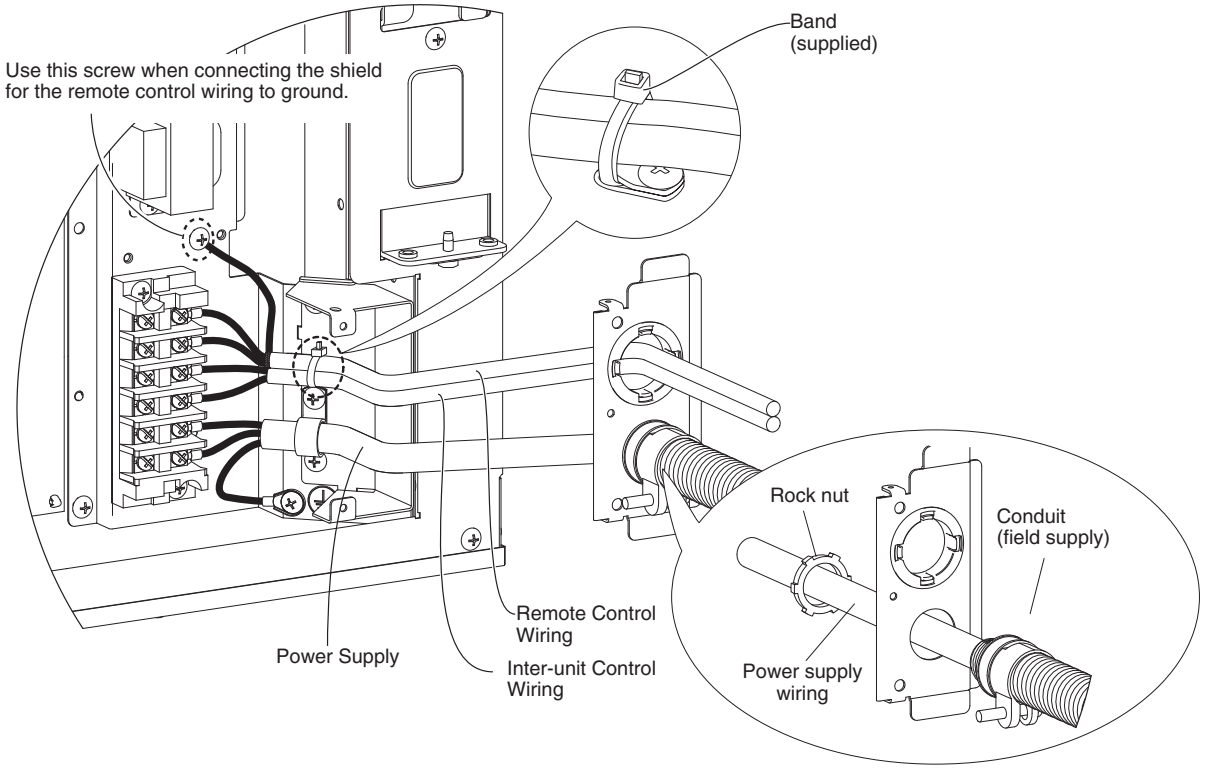


Fig. 4-4

■ Wiring sample

F2 type



5. HOW TO PROCESS TUBING

The liquid tubing side is connected by a flare nut, and the gas tubing side is connected by brazing.

5-1. Connecting the Refrigerant Tubing

Use of the Flaring Method

Many of conventional split system air conditioners employ the flaring method to connect refrigerant tubes which run between indoor and outdoor units. In this method, the copper tubes are flared at each end and connected with flare nuts.

Flaring Procedure with a Flare Tool

(1) Cut the copper tube to the required length with a tube cutter. It is recommended to cut approx. 1 – 2 ft. (30 - 50 cm) longer than the tubing length you estimate.
(2) Remove burrs at the end of the copper tube with a tube reamer or file. This process is important and should be done carefully to make a good flare. (Fig. 5-1)

NOTE

When reaming, hold the tube end downward and be sure that no copper scraps fall into the tube. (Fig. 5-2)

(3) Remove the flare nut from the unit and be sure to mount it on the copper tube.
(4) Make a flare at the end of the copper tube with a flare tool. (Fig. 5-3)

NOTE

A good flare should have the following characteristics:

- inside surface is glossy and smooth
- edge is smooth
- tapered sides are of uniform length

Caution Before Connecting Tubes Tightly

(1) Apply a sealing cap or water-proof tape to prevent dust or water from entering the tubes before they are used.
(2) Be sure to apply refrigerant lubricant to the matching surfaces of the flare and union before connecting them together. This is effective for reducing gas leaks. (Fig. 5-4)
(3) For proper connection, align the union tube and flare tube straight with each other, then screw in the flare nut lightly at first to obtain a smooth match. (Fig. 5-5)

- Adjust the shape of the liquid tube using a tube bender at the installation site and connect it to the liquid tubing side valve using a flare.

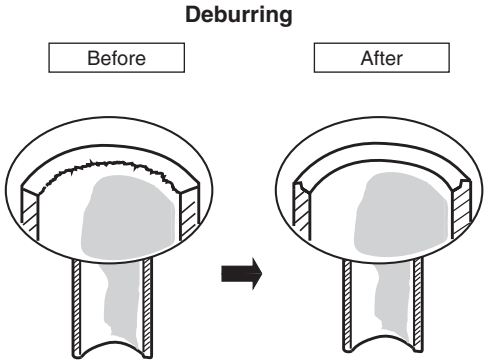


Fig. 5-1

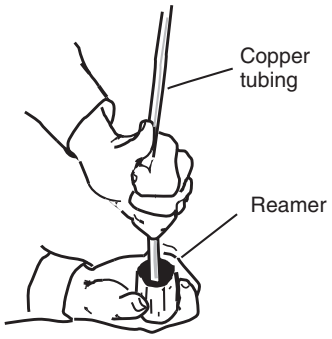


Fig. 5-2

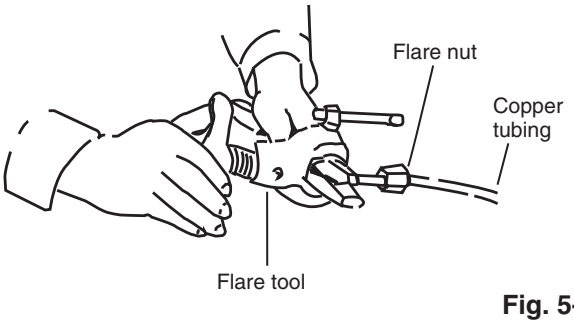


Fig. 5-3

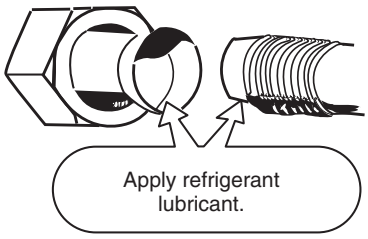


Fig. 5-4

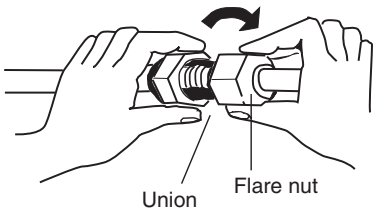


Fig. 5-5

Cautions During Brazing

- **Replace air inside the tube with nitrogen gas to prevent copper oxide film from forming during the brazing process. (Oxygen, carbon dioxide and Freon are not acceptable.)**
- **Do not allow the tubing to get too hot during brazing. The nitrogen gas inside the tubing may overheat, causing refrigerant system valves to become damaged. Therefore allow the tubing to cool when brazing.**
- **Use a reducing valve for the nitrogen cylinder.**
- **Do not use agents intended to prevent the formation of oxide film. These agents adversely affect the refrigerant and refrigerant oil, and may cause damage or malfunctions.**

5-2. Connecting Tubing Between Indoor and Outdoor Units

(1) Tightly connect the indoor-side refrigerant tubing extended from the wall with the outdoor-side tubing.

Indoor Unit Tubing Connection (ℓ_1, ℓ_2...ℓ_{n-1})

Indoor unit type		26	36
Gas tubing	inch	ø5/8	
	mm	ø15.88	
Liquid tubing	inch	ø3/8	
	mm	ø9.52	

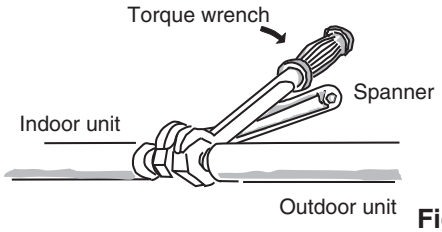


Fig. 5-6

(2) To fasten the flare nuts, apply specified torque as at right:

- When removing the flare nuts from the tubing connections, or when tightening them after connecting the tubing, be sure to use 2 adjustable wrenches or spanners. (Fig. 5-6)
  If the flare nuts are over-tightened, the flare may be damaged, which could result in refrigerant leakage and cause injury or asphyxiation to room occupants.

- For the flare nuts at tubing connections, be sure to use the flare nuts that were supplied with the unit, or else flare nuts for R410A (type 2). The refrigerant tubing that is used must be of the correct wall thickness as shown in the table at right.

Tube diameter		Tightening torque approximate	Tube thickness
ø1/4" (ø6.35 mm)	lbf·inch	120 – 160 lbf·inch	t0.032"
	N·m	14 – 18 N·m	t0.8 mm
	{kgf·cm}	{140 – 180 kgf·cm}	
ø3/8" (ø9.52 mm)	lbf·inch	300 – 360 lbf·inch	t0.032"
	N·m	34 – 42 N·m	t0.8 mm
	{kgf·cm}	{340 – 420 kgf·cm}	
ø1/2" (ø12.7 mm)	lbf·inch	430 – 540 lbf·inch	t0.032"
	N·m	49 – 61 N·m	t0.8 mm
	{kgf·cm}	{490 – 610 kgf·cm}	
ø5/8" (ø15.88 mm)	lbf·inch	590 – 710 lbf·inch	t0.04"
	N·m	68 – 82 N·m	t1.0 mm
	{kgf·cm}	{680 – 820 kgf·cm}	

Because the pressure is approximately 1.6 times higher than conventional refrigerant pressure, the use of ordinary flare nuts (type 1) or thin-walled tubes may result in tube rupture, injury, or asphyxiation caused by refrigerant leakage.

- In order to prevent damage to the flare caused by over-tightening of the flare nuts, use the table above as a guide when tightening.
- When tightening the flare nut on the liquid tube, use an adjustable wrench with a nominal handle length of 7-7/8 in. (200 mm).

5-3. Insulating the Refrigerant Tubing

Tubing Insulation

- Thermal insulation must be applied to all units tubing, including distribution joint (field supply).
  * For gas tubing, the insulation material must be heat resistant to 248°F (120°C) or above. For other tubing, it must be heat resistant to 176°F (80°C) or above.

  Insulation material thickness must be 13/32" (10 mm) or greater.

  If the conditions inside the ceiling exceed DB 86°F (30°C) and RH 70%, increase the thickness of the gas tubing insulation material by 1 step.

Two tubes arranged together

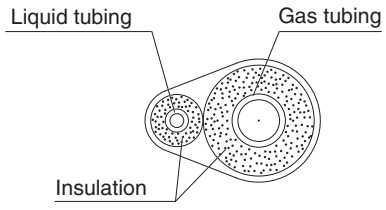


Fig. 5-7

WARNING **If the exterior of the outdoor unit valves has been finished with a square duct covering, make sure you allow sufficient space to access the valves and to allow the panels to be attached and removed.**

Taping the flare nuts

Wind the white insulation tape around the flare nuts at the gas tube connections. Then cover up the tubing connections with the flare insulator, and fill the gap at the union with the supplied black insulation tape. Finally, fasten the insulator at both ends with the supplied vinyl clamps. (Fig. 5-8)

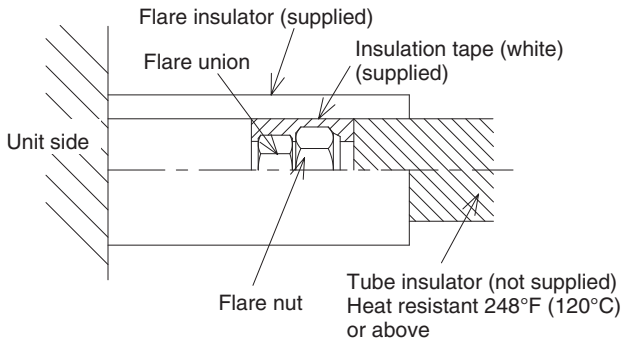


Fig. 5-8

Insulation material

The material used for insulation must have good insulation characteristics, be easy to use, be age resistant, and must not easily absorb moisture.

WARNING **After a tube has been insulated, never try to bend it into a narrow curve because it can cause the tube to break or crack.**
Never grasp the drain or refrigerant connecting outlets when moving the unit.

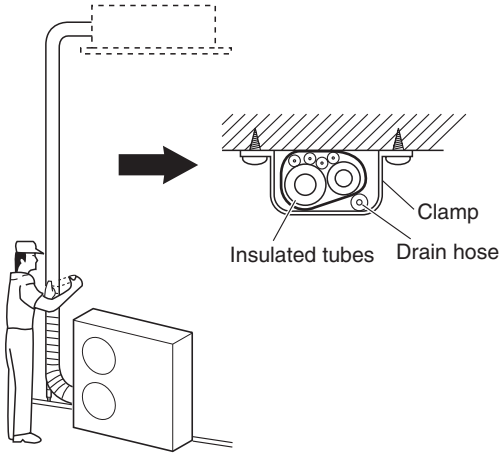


Fig. 5-9

5-4. Taping the Tubes

(1) At this time, the refrigerant tubes (and electrical wiring if local codes permit) should be taped together with armoring tape in 1 bundle. To prevent condensation from overflowing the drain pan, keep the drain hose separate from the refrigerant tubing.
(2) Wrap the armoring tape from the bottom of the outdoor unit to the top of the tubing where it enters the wall. As you wrap the tubing, overlap half of each previous tape turn.
(3) Clamp the tubing bundle to the wall, using 1 clamp approx. each meter. (Fig. 5-9)

NOTE

Do not wind the armoring tape too tightly since this will decrease the heat insulation effect. Also ensure that the condensation drain hose splits away from the bundle and drips clear of the unit and the tubing.

5-5. Finishing the Installation

After finishing insulating and taping over the tubing, use sealing putty to seal off the hole in the wall to prevent rain and draft from entering. (Fig. 5-10)

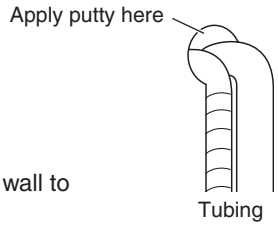
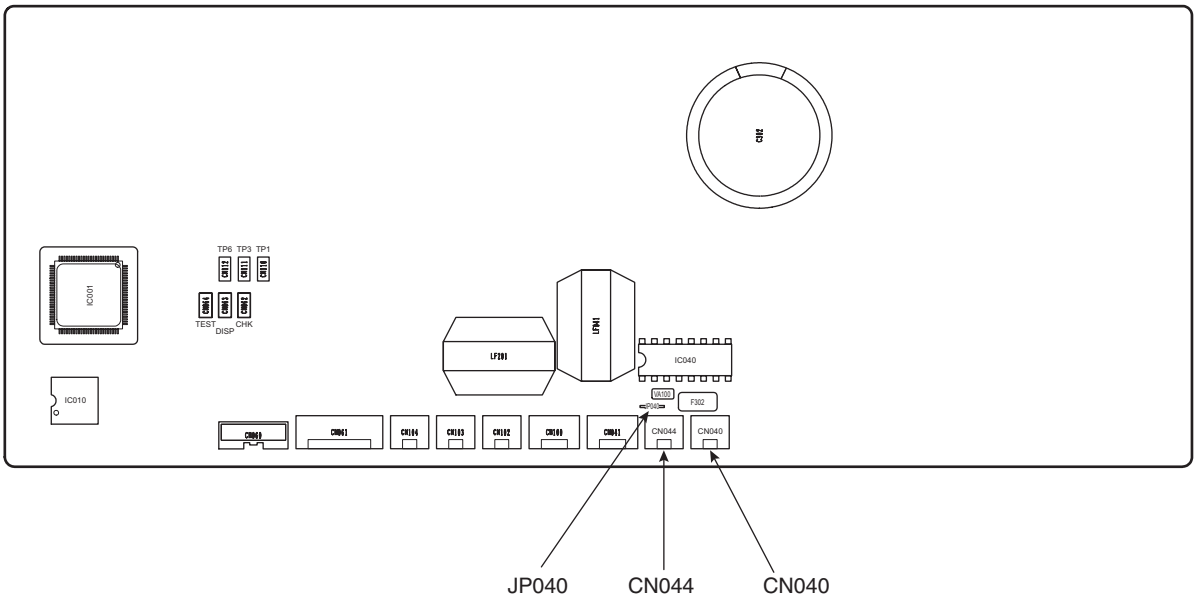


Fig. 5-10

6. PRECAUTIONS ON TEST RUN

- Request that the customer be present at the time the test run is performed. Explain the Operating Instructions to the customer and then have the customer actually operate the system.
- Be sure to pass the manual and warranty certificate to the customer.
- Verify that the AC 208 / 230 V wiring is not connected to the terminal plate which is used to connect the inter-unit control wiring.
  * If AC 208 / 230 V is accidentally applied to this terminal plate, the fuse (0.4A for both indoor and outdoor units) on the inter-unit control PCB will be tripped in order to protect the PCB. Correct the wiring connections, then disconnect the 2P connectors (blue, OC, CN040) which are connected to the PCB and connect the other 2P connectors (brown, EMG, CN044). (See the figure below.)
  If operation is still not possible with the brown connectors connected, cut the JP040.
  (Be sure to turn OFF the power before performing this work.)



7. HOW TO INSTALL THE TIMER REMOTE CONTROLLER (CZ-RTC2) OR HIGH-SPEC WIRED REMOTE CONTROLLER (CZ-RTC3) (OPTIONAL PARTS)

NOTE

Refer to the Operating Instructions attached to the optional Timer Remote Controller or optional High-spec Wired Remote Controller.

8. HOW TO INSTALL WIRELESS REMOTE CONTROLLER (OPTIONAL PARTS)

NOTE

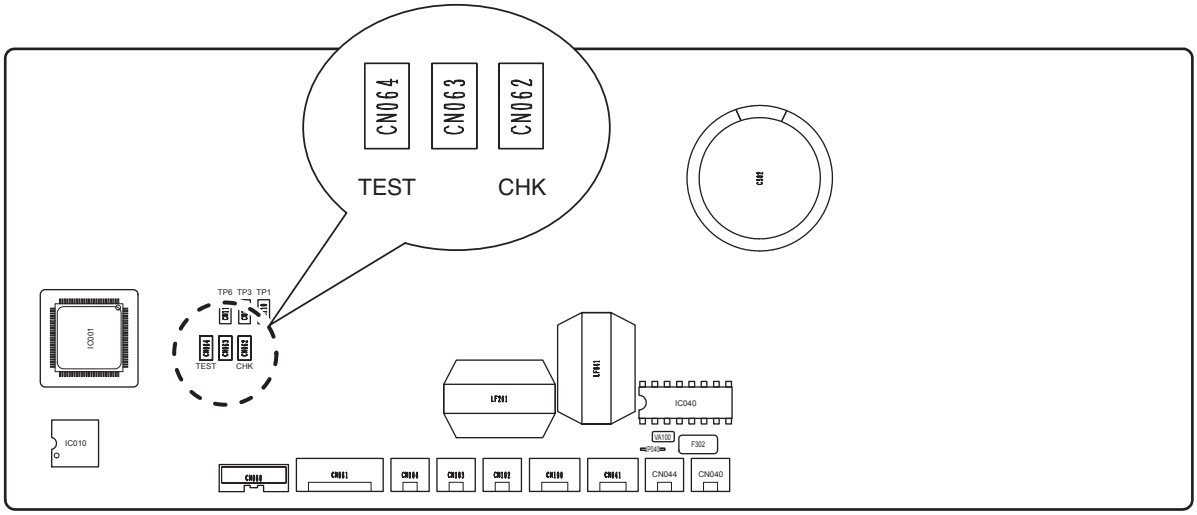
Refer to the Operating Instructions attached to the optional Wireless Remote Controller.

9. CHECKING THE DRAINAGE

After wiring and drain piping are completed, use the following procedure to check that the water will drain smoothly.
For this, prepare a bucket and wiping cloth to catch and wipe up spilled water.

(1) Remove the cover and slowly pour about 0.3 gal (1,200 cc) of water through the drain inspection port into the drain pan to check drainage.

(2) Short-circuit the check pin (CHK) on the indoor control circuit board and operate the drain pump.
Check the water flow through the drain inspection port and see if there is any leakage.



Indoor Unit control PC board

CAUTION **Be careful since the fan will start when you short the pin on the indoor control board.**

(3) When the drainage check is complete, open the check pin (CHK) and remount the insulator and drain cap onto the drain inspection port.

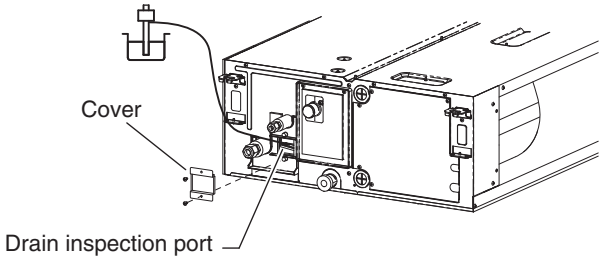


Fig. 9-1

10. EXTERNAL STATIC PRESSURE SETTING

For low silhouette ducted type indoor units, the ventilating resistance so-called “external static pressure” becomes greatly different depending on the connected duct length, shape, number of air outlet ports and types of filters.
When installing this unit, be sure to carry out the external static pressure setting in order to operate in the rated airflow volume.
Choose one of the following methods from “a”, “b”, “c” or “d” as shown in the flow chart (within the dotted lines) and then make the setting accordingly.

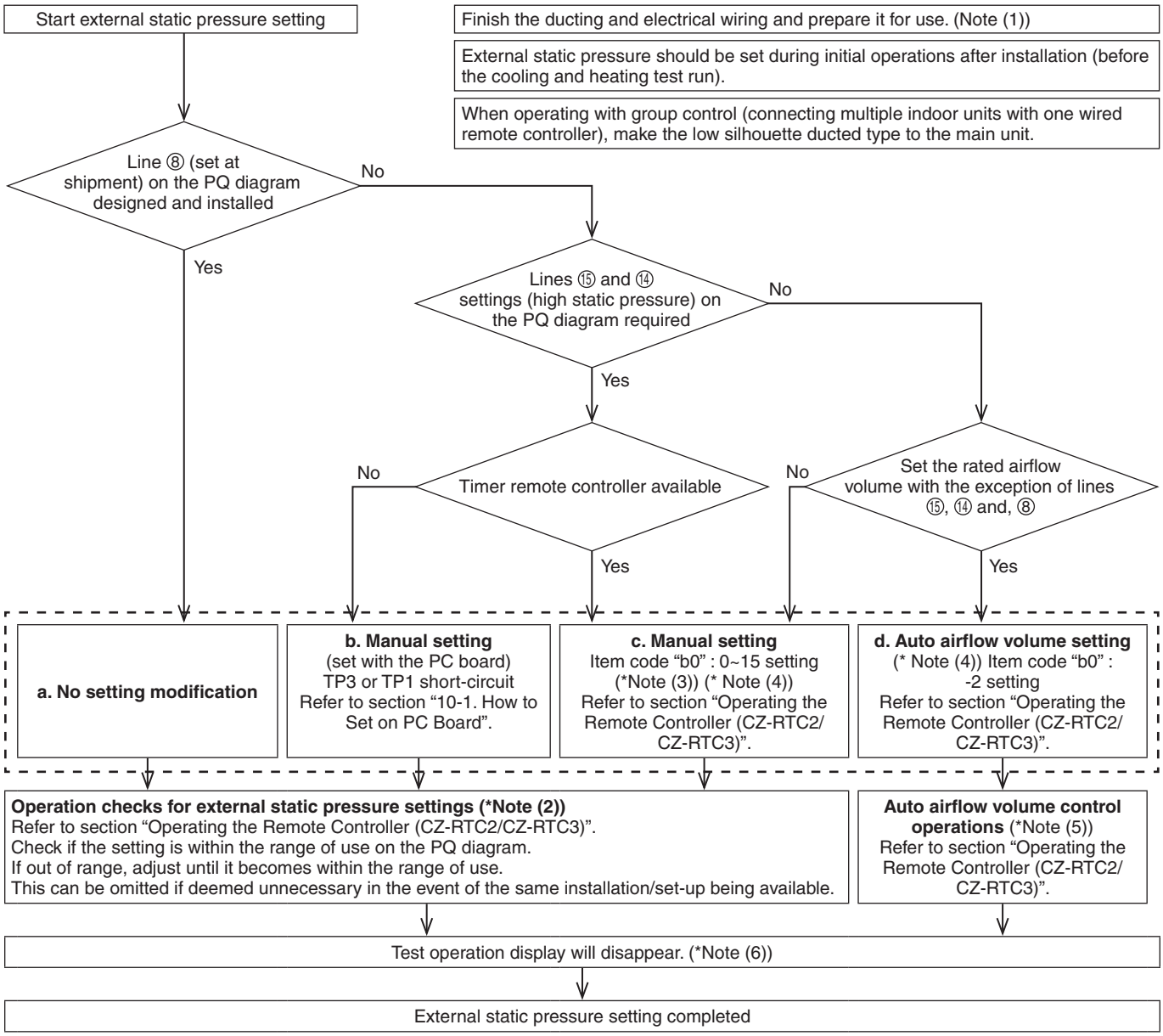
a. No setting modification ..... : Use-as-is at shipment (there are cases in which the setting may differ from the shipment setting when reset after once setting the external static pressure.)

b. Manual setting (set with the PC board) ..... : For high static pressure. Switching method with the short-circuit connector.

c. Manual setting (set with the wired remote controller) ..... : Low static pressure ~ high static pressure

d. Auto airflow volume setting (set on the wired remote controller) ..... : Air outlet volume is automatically adjusted to the rated airflow volume with the auto airflow control drive.

Flow of External Static Pressure



NOTE

(1) Check the following items before performing the setting-check operations or auto airflow volume operations.

1) Check to make sure that the electrical wiring and ducting have been completed. Activate the stand-by mode. In particular, make sure that the closed damper located in the middle of the duct is open, if installed. Also, make sure that air filters have been installed inside the air inlet duct. Check to make sure air is not leaking from the joints.

2) If multiple air outlets and air inlets are included, adjust the airflow volume ratio of all of them until they meet the design airflow ratio.

3) Make sure the address setting has been completed.

(2) The operation check will be completed in approximately three minutes if the settings have been made correctly. The settings will be modified if they are out of the range of use (maximum 30 minutes). If this is not completed within 31 minutes, check whether the air speed is set to "H" or not.

(3) Refer to Table 10-2 and Fig. 10-2 for details on the relationship between the value of item code "b0" and the external static pressure.

(4) When set in group control (connecting multiple indoor units with one wired remote controller), set each indoor unit to item code "b0". When amending the setting after selecting [b. Manual setting] (due to airflow path changes, etc.), it is necessary to cancel [b. Manual setting] (disconnect short-circuit connector). When [b. Manual setting] has not been cancelled, [c. Manual setting] and [d. Auto airflow volume setting] will be activated if selected, but [b. Manual setting] takes precedence when the power is switched back on after power outages, etc.

(5) If this is not completed within 8 minutes, check the drive mode, air speed and air inlet temperature.

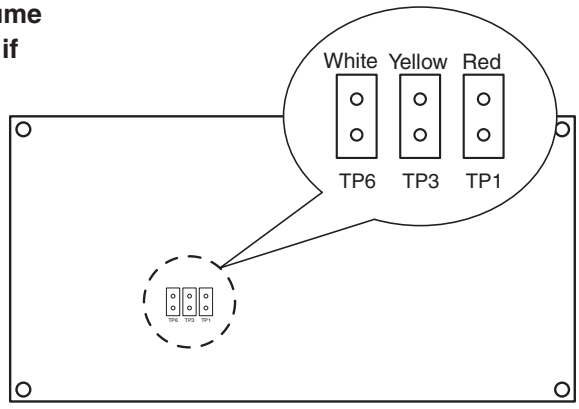
(6) When set in group control (connecting multiple indoor units with one wired remote controller), the test run operations display will disappear once the external static pressure setting check or auto airflow volume control operation check have been completed for the main unit. Decisions on sub-unit complete are not possible. The test run operation display will disappear after one hour even if the external static pressure setting check or auto airflow volume control operation check have not been completed.

CAUTION

- **Make sure the external static pressure is in a range of specifications. Then proceed the external static pressure setting. Improper settings can cause noise, a shortage of airflow volume and water leakage. Refer to Fig. 10-2 for the external static pressure setting range.**
- **There are cases in which automatic variable dampers and other mounted items may trigger the P12 alarm on systems that modify the static pressure of outdoor units when the auto airflow volume control operations or setting check operations are carried out if high static pressure in the outdoor unit is lowered. In this event, lower the dampers, etc., so that the static pressure in the outdoor unit reaches its lowest level, and then carry out the auto airflow volume control operations or setting check operations.**
- **Be sure to set the [External Static Pressure Setting] once again after amending the airflow path for the duct or air outlet after setting the external static pressure.**
- **Set the air inlet temperature within the range for use. The auto airflow volume control will not function if the air inlet temperature is over 113°F (45°C) or not in the fan mode.**

Table 10-1 Selection of connected short-circuit pins

External static pressure at the time of rated airflow volume	Short-circuit pin
Unusable	TP6 (2P: white)
0.60 in.WC (150 Pa)	TP3 (2P: yellow)
0.56 in.WC (140 Pa)	TP1 (2P: red)



Indoor Unit control PC board

Fig. 10-1

10-1. How to Set on PC Board

1. Turn off the power breaker to halt the supply of electricity to the PC board.
2. Open the lid of electrical equipment box and check where the short-circuit pin on the indoor unit control PC board is located (Fig. 10-1)
3. Short circuit the applicable short-circuit pin in accordance with the selected short-circuit pin connected (Fig. 10-2).

   0.60 in.WC (150 Pa) : TP3 (2P: yellow) short-circuit

   0.56 in.WC (140 Pa) : TP1 (2P: red) short-circuit

   * Use the short-circuit connector (2P: yellow) supplied.

10-2. Operating the Timer Remote Controller (CZ-RTC2)

10-2-1. How to set the external static pressure

1. Press and hold down the [🔧], [CANCEL] and [SET] buttons simultaneously for 4 or more seconds.
   (SETTING, the Unit No., Item Code and Detailed Data will blink on the LCD display.)
2. The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed [UNIT].
   Only the fan motor for the selected indoor unit will operate during this.
3. Specify the "b0" item code by pressing the [▲]/[▼] buttons for the temperature setting buttons and confirm the values.
   ("-001" set at shipment)
4. Press the [▲]/[▼] buttons for the time to amend the values for the set data.
   Refer to table 10-2 and Fig. 10-2 and select a value between "0001" and "0015".
   Select "-002" if the auto airflow volume setting is activated.
5. Press the [SET] button.
   The display will stop blinking and remain illuminated.
6. Press the [🔧] button. The fan motor will stop operating and the LCD display will return to the normal stop mode.

10-2-2. Auto External Static Pressure Setting Operation and Setting-Check Operation

1. Press and hold down the [🔧] button for 4 or more seconds.
   "TEST" will be displayed on the LCD display.
2. Press the [⏻] button to start the test run. [Test Run] will be displayed on the LCD display.
3. Select the fan mode and set it to "H" by pressing the [💨] button.

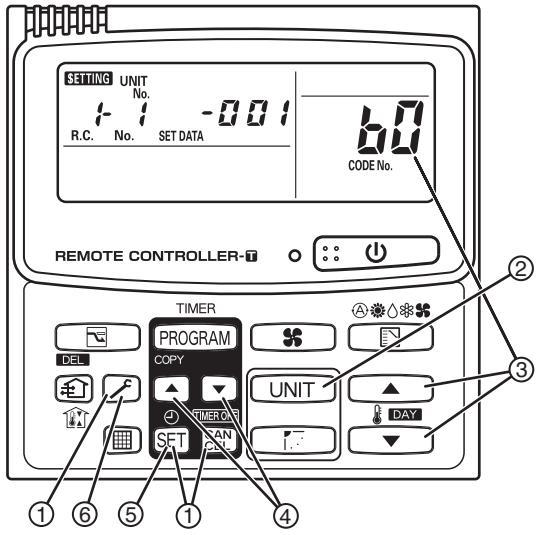
NOTE

The auto external static pressure setting operation and setting-check operation will not be performed unless [H] has been selected for the fan mode.

4. The fan motor will be activated, the auto external static pressure setting operation and setting-check operation will be performed for about 3 to 30 minutes. The fan speed will change automatically while these operations are in progress. When these operations completed, "TEST" will be disappeared from the LCD display.
5. Press the [⏻] button to halt the test run.

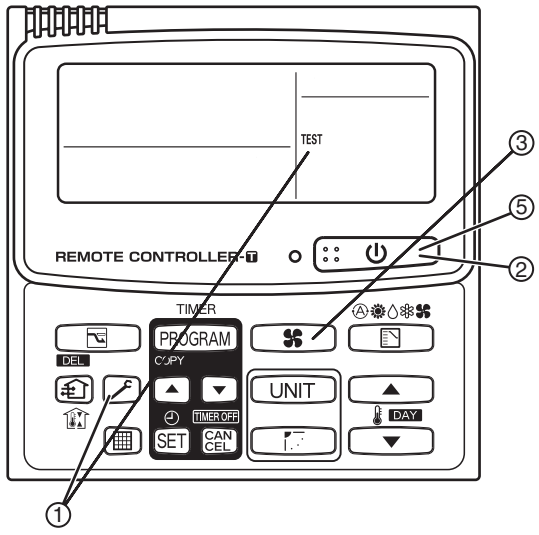
Table 10-2 Setting the external static pressure

Indoor unit		Item code
26	36	
External static pressure of the rated air flow volume		b0
0.60 in.WC (150 Pa)	0.60 in.WC (150 Pa)	0015
0.56 in.WC (140 Pa)	0.56 in.WC (140 Pa)	0014
0.52 in.WC (130 Pa)	0.52 in.WC (130 Pa)	0013
0.48 in.WC (120 Pa)	0.48 in.WC (120 Pa)	0012
0.40 in.WC (100 Pa)	0.44 in.WC (110 Pa)	0011
0.28 in.WC (70 Pa)	0.40 in.WC (100 Pa)	0008
0.24 in.WC (60 Pa)	0.28 in.WC (70 Pa)	0006
0.20 in.WC (50 Pa)	0.20 in.WC (50 Pa)	0005
0.12 in.WC (30 Pa)	0.12 in.WC (30 Pa)	0003
0.04 in.WC (10 Pa)	0.04 in.WC (10 Pa)	0001
No auto airflow volume setting		-001
Auto airflow volume setting		-002



NOTE:

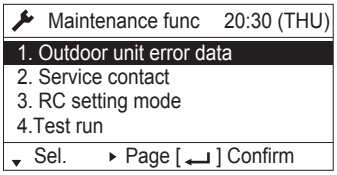
Failure to set this parameter may result in decreased airflow and condensation.



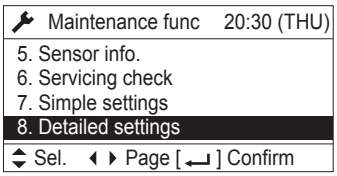
10-3. Operating the High-spec Wired Remote Controller (CZ-RTC3)

How to set the external static pressure

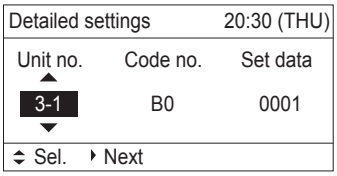
1. Keep pressing the [↩], [↵] and [▶] buttons simultaneously for 4 or more seconds.
   The "Maintenance func" screen appears on the LCD display.



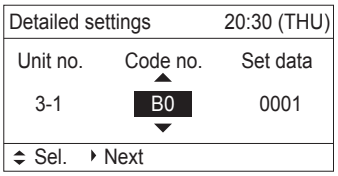
2. Press the [▼] or [▲] button to see each menu.
   If you wish to see the next screen instantly, press the [◀] or [▶] button.
   Select "8. Detailed settings" on the LCD display and press the [↵] button.



   The "Detailed settings" screen appears on the LCD display.
   Select the "Unit no." by pressing the [▼] or [▲] button for changes.



3. Select the "Code no." by pressing the [◀] or [▶] button.
   Change the "Code no." to "B0" by pressing the [▼] or [▲] button (or keeping it pressed).

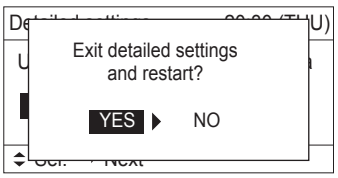


4. Select the "Set data" by pressing the [◀] or [▶] button.
   Select one of the "Set data" among "0001" – "0015" according to the desired external static pressure setting by pressing the [▼] or [▲] button.
   Then press the [↵] button.
   (See the table below.)

   When setting to auto airflow volume control:
   Select the setting data to "-002".
   Then press the [↵] button.

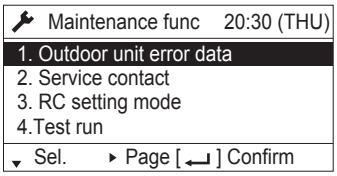
Indoor unit		Item code
26	36	
External static pressure of the rated air flow volume		**B0**
0.60 in.WC (150 Pa)	0.60 in.WC (150 Pa)	**0015**
0.56 in.WC (140 Pa)	0.56 in.WC (140 Pa)	**0014**
0.52 in.WC (130 Pa)	0.52 in.WC (130 Pa)	**0013**
0.48 in.WC (120 Pa)	0.48 in.WC (120 Pa)	**0012**
0.40 in.WC (100 Pa)	0.44 in.WC (110 Pa)	**0011**
0.28 in.WC (70 Pa)	0.40 in.WC (100 Pa)	**0008**
0.24 in.WC (60 Pa)	0.28 in.WC (70 Pa)	**0006**
0.20 in.WC (50 Pa)	0.20 in.WC (50 Pa)	**0005**
0.12 in.WC (30 Pa)	0.12 in.WC (30 Pa)	**0003**
0.04 in.WC (10 Pa)	0.04 in.WC (10 Pa)	**0001**
No auto airflow volume setting		**-001**
Auto airflow volume setting		**-002**

5. Select the "Unit no." by pressing the [◀] or [▶] button and press the [↩] button.
   The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display.
   Select "YES" and press the [↵] button.
   When the setting is completed, perform the test run for the external static pressure setting described in "Auto External Static Pressure Setting Operation".

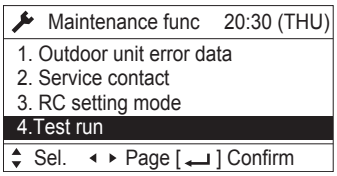


Auto External Static Pressure Setting Operation

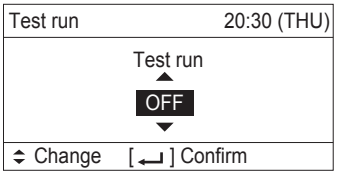
6. Keep pressing the [↩], [↵] and [▶] buttons simultaneously for 4 or more seconds.
   The “Maintenance func” screen appears on the LCD display.



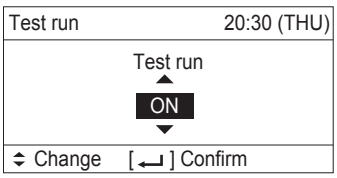
7. Press the [▼] or [▲] button to see each menu. If you wish to see the next screen instantly, press the [◀] or [▶] button.
   Select “4. Test run” on the LCD display and press the [↵] button.



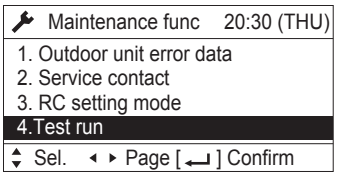
   The “Test run” screen appears on the LCD display.



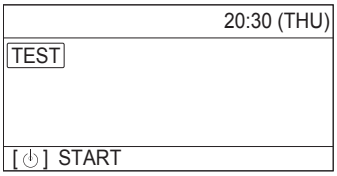
   Change the display from OFF to ON by pressing the [▼] or [▲] button. Then press the [↵] button.



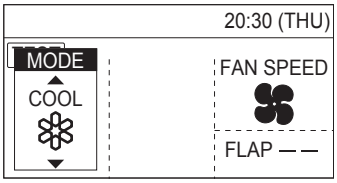
   The “Maintenance func” screen appears on the LCD display.



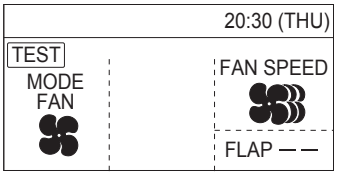
8. Press the [↩] button. “TEST” will be displayed on the LCD display.



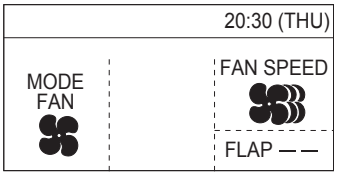
9. Press the [⏻] button. Test run will be started.
   Test run setting mode screen appears on the LCD display.



10. Set the operation mode to “ ” and fan speed mode to “ ” by pressing the [◀] or [▶] button or [▼] or [▲] button. Then press the [↵] button.



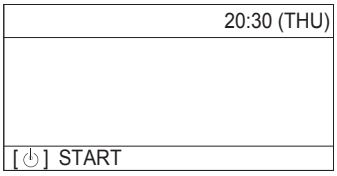
    The fan motor will be activated, the auto external static pressure setting operation and setting-check operation will be performed for about 3 to 30 minutes.
    The fan speed will change automatically while these operations are in progress. When these operations completed, “TEST” will be disappeared from the LCD display.



NOTE:

The auto external static pressure setting operation and setting-check operation will not be performed unless “ (MODE FAN)” and “ (FAN SPEED)” have been selected.

11. Press the [⏻] button.
    The LCD display will be returned to the initial screen.



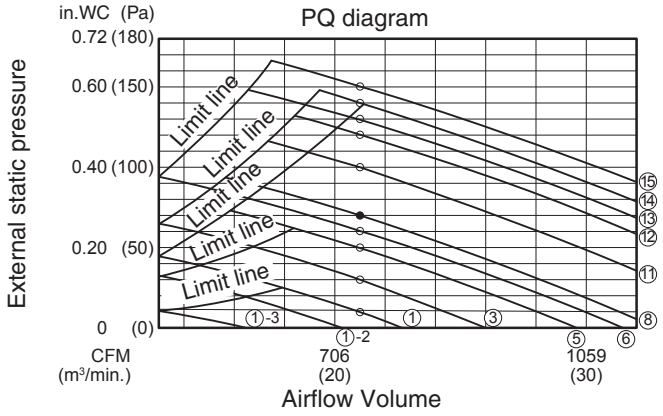
NOTE:

Failure to set this parameter may result in decreased airflow and condensation.

Indoor Fan Performance

		Item code "60"																			
		0015		0014		0013		0012		0011		0008		0006		0005		0003		0001	
		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Tap	⑮	H	H									Setting at shipment									
	⑭			H	H																
	⑬	M	M			H	H														
	⑫							H	H												
	⑪				M					H	H										
	⑧			M			M	M	M			H	H								
	⑥	L	L			M				M	M			H	H						
	⑤											M	M			H	H				
	③				L		L	L	L	L	L			M	M	M	M	H	H		
	①			L		L						L	L	L	L			M	M	H	H
	①-2															L	L	L	L	M	M
	①-3																			L	L

Type 26



Type 36

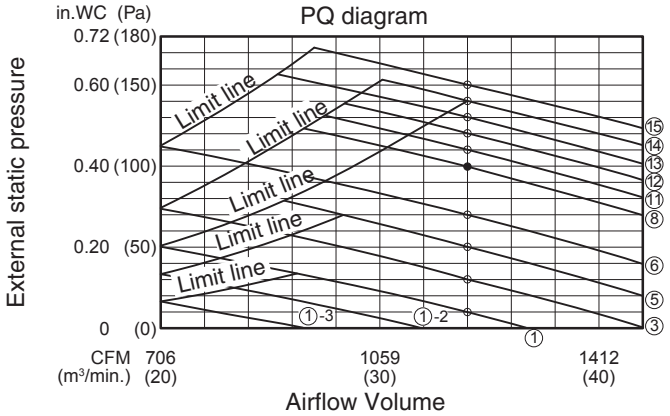


Fig. 10-2

11. APPENDIX

■ Care and Cleaning

WARNING

- **For safety, be sure to turn the air conditioner off and also to disconnect the power before cleaning.**
- **Do not pour water on the indoor unit to clean it. This will damage the internal components and cause an electric shock hazard.**

Air intake and outlet side (Indoor unit)

Clean the air intake and outlet side of the indoor unit with a vacuum cleaner brush, or wipe them with a clean, soft cloth. If these parts are stained, use a clean cloth moistened with water. When cleaning the air outlet side, be careful not to force the vanes out of place.

CAUTION

- **Never use solvents or harsh chemicals when cleaning the indoor unit. Do not wipe plastic parts using very hot water.**
- **Some metal edges and the fins are sharp and may cause injury if handled improperly; be especially careful when you clean these parts.**

Air filter

- **In case of Installing the Air Filter (field supply)**

The air filter collects dust and other particles from the air and should be cleaned at regular intervals as indicated in the table below.
If the filter gets blocked, the efficiency of the air conditioner drops greatly.

Type	F2
Period	(Depends on filter's specifications)

When cleaning the air filter, consult your dealer or service center.

CAUTION

- **Certain metal edges and the condenser fins are sharp and may cause injury if handled improperly; special care should be taken when you clean these parts.**
- **The internal coil and other components must also be cleaned periodically. Consult your dealer or service center.**

Care: After a prolonged idle period

Check the indoor and outdoor unit air intakes and outlets for blockage; if there is a blockage, remove it.

Care: Before a prolonged idle period

- Operate the fan for half a day to dry out the inside.
- Disconnect the power supply and also turn off the circuit breaker.
- Clean the air filter and replace it in its original position.

■ Troubleshooting

If your air conditioner does not work properly, first check the following points before requesting service. If it still does not work properly, contact your dealer or a service center.

● Indoor unit

Symptom		Cause
Noise	Sound like streaming water during operation or after operation.	● Sound of refrigerant liquid flowing inside unit ● Sound of drainage water through drain pipe
	Cracking noise during operation or when operation stops.	Cracking sound due to temperature changes of parts
Odor	Discharged air is smelled during operation.	Indoor odor components, cigarette odor and cosmetic odor accumurated in the air conditioner and its air is discharged. Unit inside is dusty. Consult your dealer.
Dewdrop	Dewdrop gets accumurated near air discharge during operation.	Indoor moisture is cooled by cool wind and accumulated by dewdrop.
Fog	Fog occurs during operation in cooling mode. (Places where large amounts of oil mist exist at restaurants.)	● Cleaning is necessary because unit inside (heat exchanger) is dirty. Consult your dealer as technical engineering is required. ● During defrost operation
Fan is rotating for a while even though operation stops.		● Fan rotating makes operation smoothly. ● Fan may sometimes rotates because of drying heat exchanger due to settings.
Wind-direction changes while operating. Wind-direction setting cannot be made. Wind-direction cannot be changed.		● When air discharge temperature is low or during defrost operation, horizontal wind flow is made automatically. ● Flap position is occasionally set up individually.
When wind-direction is changed, flap operates several times and stops at designated position.		When wind-direction is changed, flap operates after searching for standard position.
Dust		Dust accumulation inside indoor unit is discharged.
At the initial high-speed operation, the fan may sometimes rotate faster (for 3 to 30 minutes) than the setting speed.		This is for operation check in order to confirm whether the fan motor rotation is within use range.

● Check Before Requiring Services

Symptom	Cause	Remedy
Air conditioner does not run at all although power is turned on.	Power failure or after power failure	Press ON/OFF operation button on remote controller again.
	Operation button is turned off.	● Switch on power if breaker is turned off. ● If breaker has been tripped, consult your dealer without turning it on.
	Fuse blow out.	If blown out, consult your dealer.
Poor cooling or heating performance.	Air intake or air discharge port of indoor and outdoor units is clogged with dust or obstacles.	Remove dust or obstruction.
	Wind speed switch is set to “Low”.	Change to “High” or “Strong”.
	Improper temperature settings	Refer to “ ■ Tips for Energy Saving”.
	Room is exposed to direct sunlight in cooling mode.	
	Doors and /or windows are open.	
	Air filter is clogged.	Refer to “ ■ Care and Cleaning”.
	Too much heat sources in room in cooling mode.	Use minimum heat sources and in a short time.
	Too many people in room in cooling mode.	Reduce temperature settings or change to “High” or “Strong”.

If your air conditioner still does not work properly although you checked the points as described above, first stop the operation and turn off the power switch. Then contact your dealer and report the serial number and symptom. Never repair your air conditioner by yourself since it is very dangerous for you to do so. You also report if the inspection mark ⚠ and the letters E, F, H, L, P in combination with the numbers appear on the LCD of the remote controller.

■ Tips for Energy Saving

Avoid

- **Do not block the air intake and outlet of the unit. If either is obstructed, the unit will not work well, and may be damaged.**
- Do not let direct sunlight into the room. Use sunshades, blinds or curtains.
  If the walls and ceiling of the room are warmed by the sun, it will take longer to cool the room.

Do

- Always try to keep the air filter clean. (Refer to “Care and Cleaning”.) A clogged filter will impair the performance of the unit.
- To prevent conditioned air from escaping, keep windows, doors and any other openings closed.

NOTE

Should the power fail while the unit is running

If the power supply for this unit is temporarily cut off, the unit will automatically resume operation once power is restored using the same settings before the power was interrupted.

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