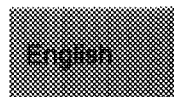


INSTALLATION MANUAL

Model **MXZ-32SV**



CONTENTS



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1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- Please provide an exclusive circuit for the air conditioner and make sure that no other electrical appliances are connected to it. Please report to your supply authority or obtain their consent before connecting this equipment to the power supply system. This equipment does not comply with the relevant technical standard for the limitation of harmonic current and, therefore, may cause adverse effects to other electrical appliances.
- Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditioner.
- Be sure to observe the cautions specified here as they include important items related to safety.
- The indications and meanings are as follows.

⚠ **WARNING:** Could lead to death, serious injury, etc.

⚠ **CAUTION:** Could lead to serious injury in particular environments when operated incorrectly.

- After reading this manual, be sure to keep it together with the OPERATING INSTRUCTIONS in a handy place on the customer's site.

⚠ WARNING

- **Do not install the unit by yourself (customer).** Incomplete installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.
- **Install the unit securely in a place which can bear the weight of the unit.** When installed in an insufficient strong place, the unit could fall causing injury.
- **Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal block connecting sections so the stress of the wires is not applied to the sections.** Incomplete connecting and fixing could cause fire.
- **Do not use intermediate connection of the power cord or the extension cord and do not connect many devices to one AC outlet.** It could cause a fire or an electric shock due to defective contact, defective insulation, exceeding the permissible current, etc.
- **Check that the refrigerant gas due not leak after installation has completed.**
- **Perform the installation securely referring to the installation manual.** Incomplete installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.
- **Perform electrical work according to the installation manual and be sure to use an exclusive circuit.** If the capacity of the power circuit is insufficient or there is insufficient electrical work, it could result in a fire or an electric shock.
- **Attach the electrical cover to the indoor unit and the service panel to the outdoor unit securely.** If the electrical cover in the indoor unit and/or the service panel in the outdoor unit are not attached securely, it could result in a fire or an electric shock due to dust water, etc.
- **Be sure to use the part provided or specified parts for the installation work.** The use of defective parts could cause an injury due to a fire, an electric shock, the unit falling, leakage of water, etc.
- **Be sure to cut off the main power in case of setting up the indoor electronic control P.C. board or wiring works.** It could cause an electric shock.

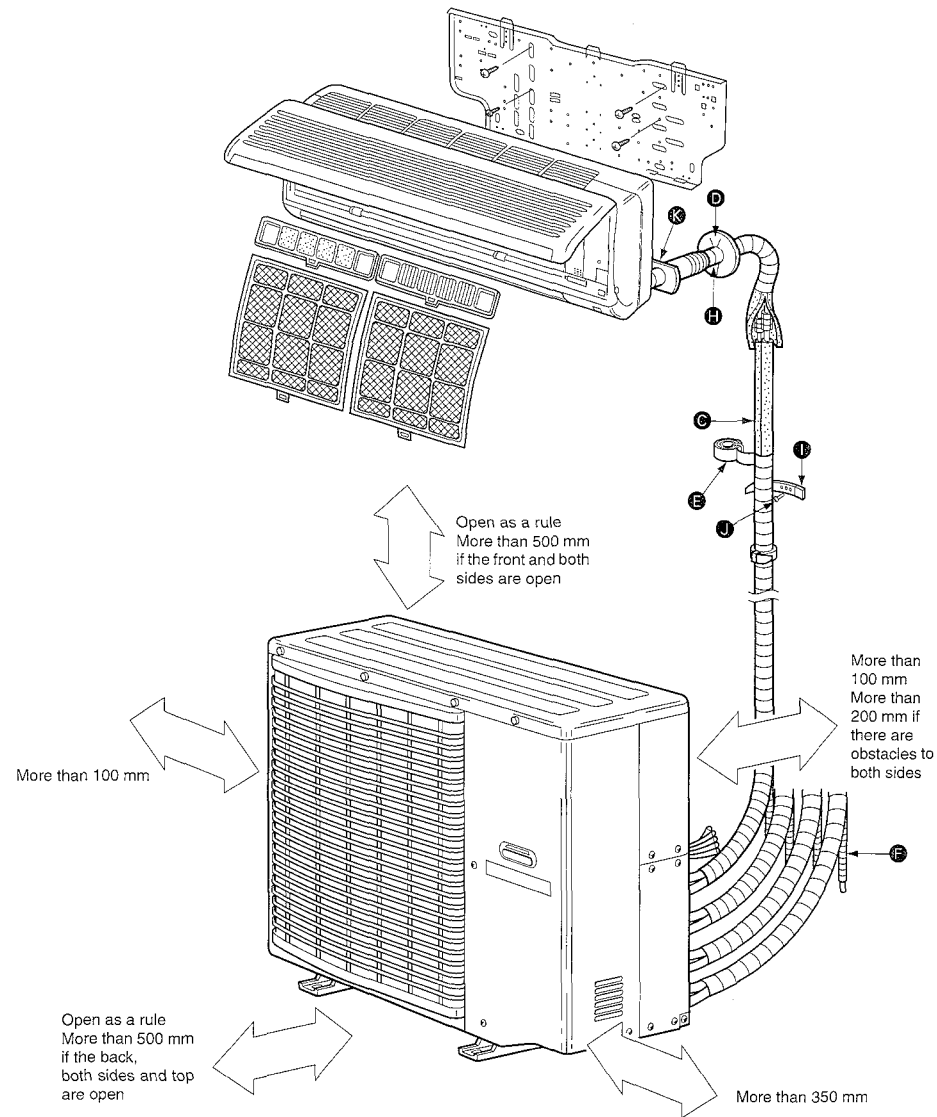
⚠ CAUTION

- **Perform grounding.** Do not connect the ground wire to a gas pipe, water pipe, lightning rod or telephone ground wire. Defective grounding could cause an electric shock.
- **Do not install the unit in a place where an inflammable gas leaks.** If gas leak and accumulate in the area surrounding the unit, it could cause an explosion.
- **Install a ground leakage breaker depending on the installation place (Where it is humid).** If a ground leakage breaker is not installed, it could cause an electric shock.
- **Perform the drainage/piping work securely according to the installation manual.** If there is a defect in the drainage/piping work, water could drop from the unit and household goods could be wet and damaged.

2. INSTALLATION DIAGRAM & ACCESSORIES

Before installation

This installation manual is only for the outdoor unit installation. In installing the indoor units, refer to the installation manual attached to each indoor unit. Any structural alternations necessary for the installation must comply with the local building code requirements.



Note:

The dimensions given along the arrows above are required to guarantee the air conditioner's performance. Install the unit in as wide a place as possible for later service or repairs.

3. SELECTING THE INSTALLATION LOCATION

ACCESSORIES

Check the following parts before to installation.

<Outdoor unit>

①	Drain socket	1
②	Drain cap	2

Parts to be locally procured

Ⓐ	Power supply cord (3-core 2.5 mm ² VVF cable)	1
Ⓑ	Indoor/outdoor unit connecting wire (2-core 1.0 mm ² -2.0 mm ² VVF cable)	1
Ⓒ	Extension pipe According to "Selecting pipe size"	1
Ⓓ	Wall hole cover	1
Ⓔ	Piping tape	1
Ⓕ	Extension drain hose (or soft vinyl chloride hose of 15 mm in internal dia. or hard vinyl chloride pipe VP16)	1
Ⓖ	Refrigeration oil	Little amount
Ⓗ	Putty	1
①	Pipe fixing band (The number depends on the pipe length.)	2 to 7
②	Fixing screw for ① (The number depends on the pipe length.)	2 to 7
③	Wall hole sleeve	1

NOTE:

- Do not use the drain socket and the drain cap in the cold region.
Drain may freeze and it makes the fan stop.

- The "Q'ty" for Ⓑ to Ⓚ in the above table is the quantity to be used per indoor unit.

⚠ WARNING:

Be sure to use specified accessories and supplied parts for installation work. If there is some deficiency in parts, it may cause a risk of fire, electric shock, injury by a unit fall or water leakage.

Constraints On Indoor Unit Installation

You should note that indoor unit that can be connected to this outdoor unit have the following constraints on them.

- Indoor units with model numbers 07, 09, 12, 13 and 18 can be connected. Refer to the table below for possible two-room, three-room and four-room indoor unit combinations.

* SEH-1.6AR is applicable to 12 model.
SEH-2AR is applicable to 18 model.

Combination (Models) 45 combinations possible					
07+07	07+09	07+12(13)	07+18	09+09	09+12(13)
09+18	12(13)+12(13)	12(13)+18	18+18	07+07+07	07+07+09
07+07+12(13)	07+07+18	07+09+09	07+09+12(13)	07+09+18	07+12(13)+12(13)
07+12(13)+18	07+18+18	09+09+09	09+09+12(13)	09+09+18	09+12(13)+12(13)
09+12(13)+18	09+18+18	12(13)+12(13)+12(13)	12(13)+12(13)+18	07+07+07+07	07+07+07+09
07+07+07+12(13)	07+07+07+18	07+07+09+09	07+07+09+12(13)	07+07+09+18	07+07+12(13)+12(13)
07+07+12(13)+18	07+09+09+09	07+09+09+12(13)	07+09+09+18	07+09+12(13)+12(13)	09+09+09+09
09+09+09+12(13)	09+09+09+18	09+09+12(13)+12(13)			

- Where it is not exposed to strong wind.
- Where airflow is good and dustless.
- Where it is not exposed to rain and direct sunshine.
- Where neighbours are not annoyed by operation sound or hot air.
- Where rigid wall or support is available to prevent the increase of operation sound or vibration.
- Where there is no risk of combustible gas leakage.
- When installing the unit at a high level, be sure to fix the unit legs.
- Where it is at least 3 m away from the antenna of TV set or radio. (Otherwise images would be disturbed or noise would be generated.)
- Install the unit at level.

⚠ WARNING:

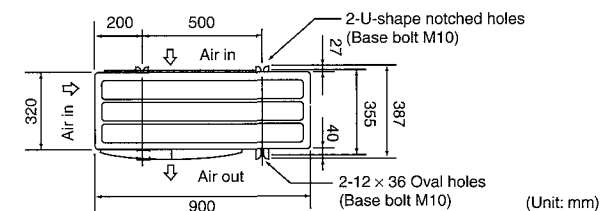
Be sure to install the unit in a place that well sustains its weight.

Installing in a place with less strength may result in a unit falling, causing a risk of injury.

⚠ CAUTION:

Avoid the following places for installation where air conditioner trouble is liable to occur.

- Where there is too much machine oil.
- Salty environment as seaside areas.
- Hot-spring areas.
- Where sulfide gas exists.
- Other special atmospheric areas.

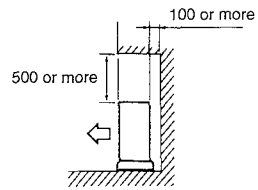


4. OUTDOOR UNIT INSTALLATION

FREE SPACE REQUIRED AROUND OUTDOOR UNIT (Unit: mm)

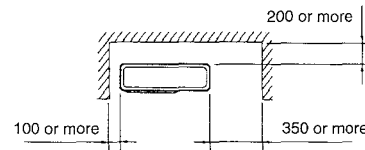
1. Top side obstacles

When there is an obstacle behind the rear side only, it does not matter if there is an obstacle over the top side as shown in the figure below.



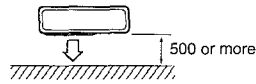
2. Front (blowing) side open

As long as space like the one shown in the figure can be maintained, it does not matter if there are obstacles in this direction (but top side is open).



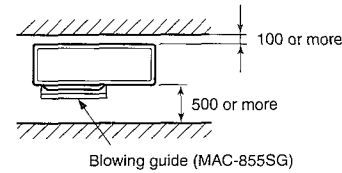
3. Obstacles on front (blowing) side only

In this case, the rear, both sides and top should be open.



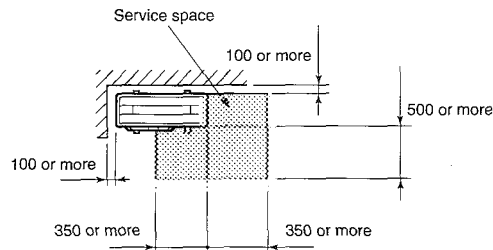
4. Obstacles on front and rear side only

The unit can be used by attaching an optional outdoor blowing guide (MAC-855SG) (but both sides and top are open).



5. Service space

Keep the service space as shown in the figure below for maintenance.

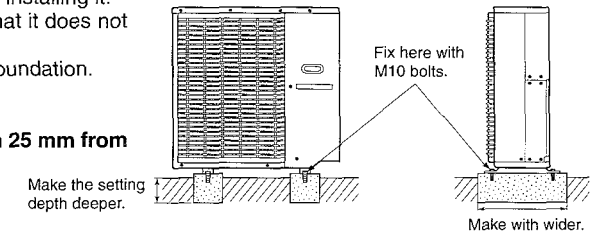


4-1 INSTALLING THE UNIT

- Be sure to fix the unit's legs with bolts when installing it.
- Be sure to install the unit firmly to ensure that it does not fall by an earthquake or a gust.
- Refer to the figure in the right for concrete foundation.

Note:

The length of anchor bolts should be within 25 mm from each anchor leg.

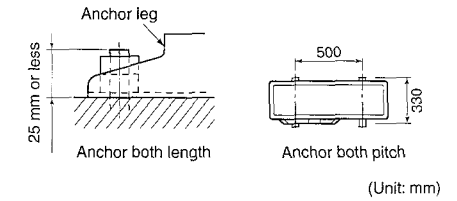


- Do not use the drain socket and the drain cap in the cold region. Drain may freeze and it makes the fan stop.

⚠ CAUTION:

Be sure to carry out drain piping work following the installation manual.

If there is some deficiency in draining and piping work, it may cause a risk of dripping from the unit, wetting or forlorn your property.



4-2 MOUNTING ARRANGEMENT OF DRAIN SOCKET

- ① Please choose one hole to discharge drain and install the drain socket to the hole.
- ② Please close the rest of the holes with the drain caps.

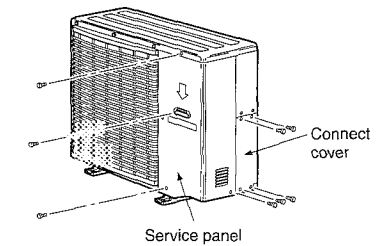
⚠ CAUTION:

Do not use drain socket and drain cap in the cold region. Drain may freeze and it makes the fan stop.

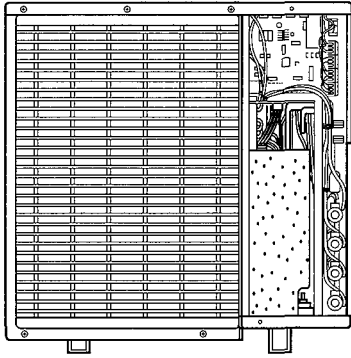
- ③ Please connect a vinyl hose of 25 mm in the inside diameter on the market with the drain socket and lead drain.

4-3 HOW TO REMOVE THE SERVICE PANEL AND THE CONNECT COVER

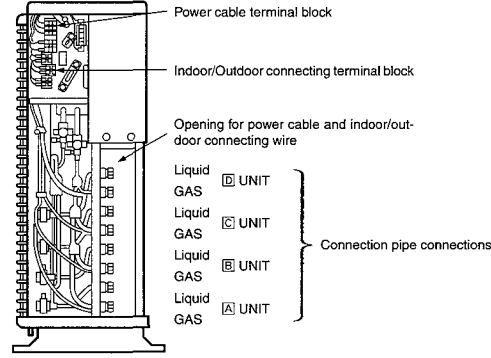
- Remove the four service panel securing screws, and pull the panel down in an arrow direction to remove the service panel.
- Remove the four connect cover securing screws to remove the connect cover.



<Front View>



<Right Side View>



4-4 INDOOR/OUTDOOR WIRE CONNECTION AND OUTDOOR POWER SUPPLY CORD CONNECTION

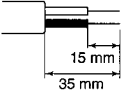
- Be sure to lead in the power supply cord **A** to the air conditioner in accordance with the specification table below and "Technical Standards for Electrical Installation".
- Be sure to use special circuits for room air conditioner.

CAUTION:
Attach an earth leakage breaker according to your installation location. If any breaker is not attached, it may cause a risk of electric shock.

WARNING:
Be sure to comply with "Technical Standards for Electrical Installation", follow this manual and use special circuits for electrical work. If there is a lack of circuit capacity or some deficiency in installation, it may cause a risk of fire or electric shock.
Overcurrent that might be produced may include DC substances. Be careful to choose the correct type of overcurrent protection switch.

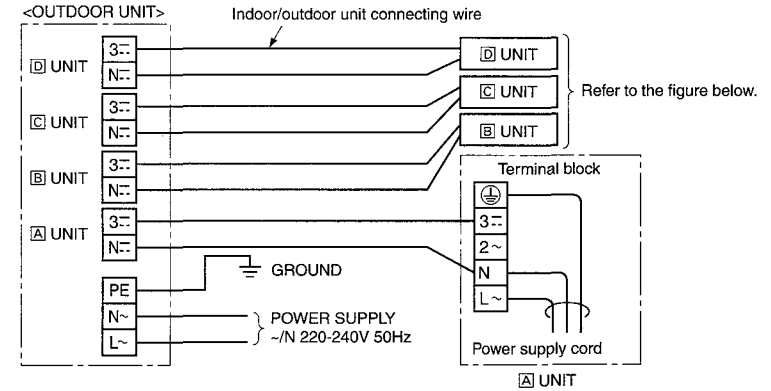
Rated Voltage	Breaker capacity	Power supply cord
220-240 V	25 A	3 wire 2.5 mm ²

- Peel off both ends of the cables as shown in the right.
- Take care not to let the cables contact the pipes inside the unit.
- Take enough care to connect the indoor/outdoor unit connecting wire correctly between the respective indoor units and the outdoor unit.



- For the power supply cord and the indoor/outdoor unit connecting wires, be sure to use the ones in compliance with the standards.
- Be sure to push the core until it is hidden and pull each cable to make sure that it is not pulled up incomplete insertion may cause a risk of burning the terminal blocks.

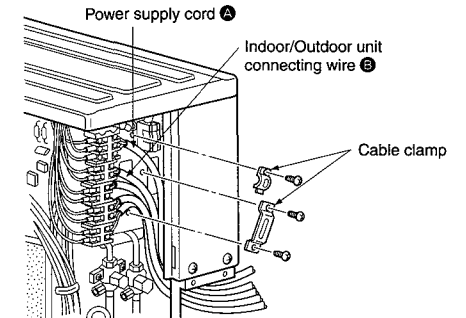
This installation manual is only for the outdoor unit installation. In installing the indoor units, refer to the installation manual attached to each indoor unit.



WARNING:
Use the indoor/outdoor unit connecting wire that meets the Standards to connect the indoor and outdoor units and fix the wire to the terminal block securely so that no external force is conveyed to the connecting section of the terminal block. Incomplete connection or fixing of the wire could result in a fire.

- Give extra length to both power supply cord **A** and indoor/outdoor unit connecting wire **B** taking later service into account.
- After making connections between both power supply cord **A** and indoor/outdoor unit connecting wire **B**, be sure to fix both cable and wire with cable clamps.

WARNING:
Be sure to attach the terminal block covers (panel) of both indoor and outdoor units. If there is some deficiency in terminal block cover (panel) attachment, it may cause a risk of fire or electric shock due to dust or water.



5. INDOOR/OUTDOOR UNITS CONNECTION FINISHING AND TEST RUN

5-1 FLARED CONNECTIONS

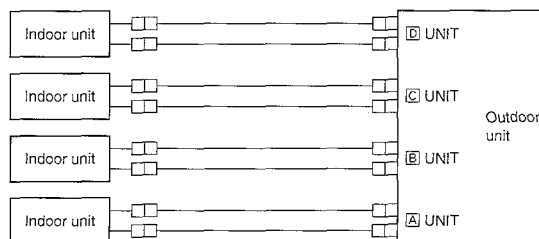
PIPE LENGTH AND HEIGHT DIFFERENCE

Limits	
Pipe length per indoor unit	25 m max.
Total pipe length for multi-system	60 m max.
Height difference	10 m max.
No. of bends per indoor unit	25 max.
Total No. of bends for multi-system	60 max.

Note:

There is no need to fill refrigerant.

Since the outdoor unit for this model has refrigerant filled for connection pipes, do not fill any additional refrigerant. Do not also exceed the allowable length of pipes given in the table above in piping work.



- For pipe size, see the table below.

SELECTING PIPE SIZE

The diameter of connection pipes differs according to the type and capacity of indoor units. Match the diameters of connection pipes for indoor and outdoor units according to the following table.

Model name	Pipe size for indoor unit		Allowable connection pipe size
07	Liquid pipe	ø6.35 mm	ø6.35 mm
09	Gas pipe	ø9.52 mm	ø9.52 mm
12	Liquid pipe	ø6.35 mm	ø6.35 mm
13	Gas pipe	ø12.7 mm	ø12.7 mm
18	Liquid pipe	ø6.35 mm	ø6.35 mm
	Gas pipe	ø15.88 mm	ø15.88 mm

Valve size for outdoor unit		
A UNIT	Liquid pipe	ø6.35 mm
	Gas pipe	ø12.7 mm
B UNIT	Liquid pipe	ø6.35 mm
	Gas pipe	ø12.7 mm
C UNIT	Liquid pipe	ø6.35 mm
	Gas pipe	ø9.52 mm
D UNIT	Liquid pipe	ø6.35 mm
	Gas pipe	ø9.52 mm

- If the diameter of connection pipes does not match the diameter of pipe end connections, use optional different-diameter joints.
- When connecting the model 12 or 13 to either outdoor unit C or D, use optional different-diameter joints (MAC-454JP) because the valve size of gas pipes for the outdoor unit is ø9.52 mm.
- When connecting the model 07 or 09 to either outdoor unit A or B, use optional different-diameter joints (MAC-455JP) because the valve size of gas pipes for the outdoor unit is ø12.7 mm.
- When connecting the model 18 to either outdoor unit A or B, use optional different-diameter joints (MAC-456JP) because the diameter of pipes for the outdoor unit is ø12.7 mm.

PIPING PREPARATION

- ① If you use commercially available copper pipes, use the following table for pipe specifications.

	Outside diameter	Wall thickness
Liquid pipe	ø6.35 mm	0.8 mm
Gas pipe	ø9.52 mm	0.8 mm
Gas pipe	ø12.7 mm	1.0 mm
Gas pipe	ø15.88 mm	1.02 mm

- ② For insulation material, use 8 mm-thick heat-insulating expanded polyethylene with a specific gravity of 0.045.
 ③ Ensure that the 2 refrigerant pipes are insulated to prevent condensation.
 ④ Refrigerant pipe bending radius must be 100 mm or more.

⚠ CAUTION:

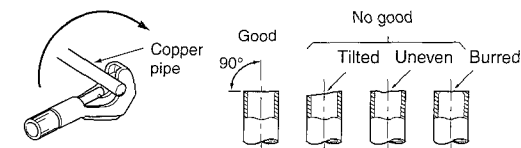
Be sure to use the insulation of specified thickness. Excessive thickness may cause incorrect installation of the indoor unit and lack of thickness may cause dew drippage.

5-2 FLARING WORK

- Main cause of gas leakage is defect in flaring work.
 Perform flaring work correctly in the following procedure.

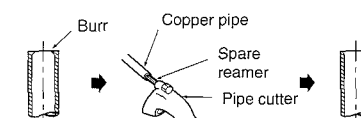
1. Pipe cutting

- Cut the copper pipe correctly with pipe cutter.



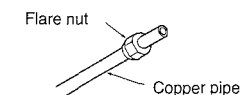
2. Burrs removal

- Completely remove all burrs from the cut cross section of the pipe.
- Put the end of the copper pipe downward to prevent burrs from dropping in the pipe.



3. Putting nut on

- Remove flare nuts attached to indoor and outdoor units, then put them on pipe having completed burr removal.
 (not possible to put them on after flaring work)

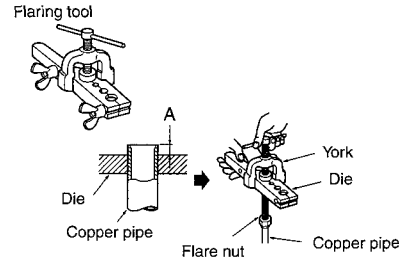


4. Flaring work

- Perform flaring work using flaring tool as shown in the right.

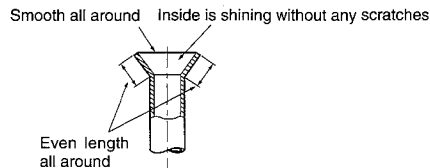
Pipe diameter	A (mm)
ø6.35 mm	2.0 to 2.5
ø9.52 mm	3.0 to 3.5
ø12.7 mm	3.5 to 4.0
ø15.88 mm	3.5 to 4.0

Firmly hold copper pipe in a die in the dimension shown in the table above.



5. Check

- Compare the flared work with the figure below.
- If flare is noted to be defective, cut off the flared section and perform flaring work again.

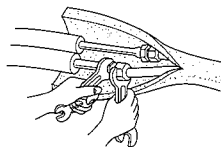


5-3 PIPE CONNECTION

1. Indoor unit connection

- Connect both liquid pipe and gas pipe to indoor unit.
 - Apply a thin coat of refrigeration oil to the seat surface of pipe.
 - For connection, align the center of both pipe and union, then tighten the first 3 to 4 turns in flare nut by hand.
 - For tightening the union part of the indoor unit side, use the table below as a standard and tighten the flare nut with two wrenches. Excessive tightening damages the flared section.

Pipe diamete	Tightening torque	
	N·m	kgf·cm
ø6.35 mm	13.7 to 17.7	140 to 180
ø9.52 mm	34.3 to 41.2	350 to 420
ø12.7 mm	49.0 to 56.4	500 to 575
ø15.88 mm	73.5 to 78.4	750 to 800



2. Outdoor unit connection

- Connect pipes to the pipe joint part of the stop valve in the same method as the indoor unit.
 - For tightening, use the same tightening torque applied for indoor unit and tighten the flare nut with torque wrench or spanner.

INSULATION AND TAPING

- Cover piping joints with pipe cover.
- For outdoor unit side, surely insulate every piping including valves.
- Using piping tape (E), apply taping starting from the entry of outdoor unit.
 - Fix the end of piping tape (E) with adhesive tape.
- When piping has to be arranged through above ceiling, closet or area where the temperature and humidity are high, wind additional commercially sold insulation for prevention of condensation.

5-4 PURGING PROCEDURES • LEAK TEST

- For details about how to use manifold valves, see the instruction manual for manifold valves.
- The valve knob Hi below cannot operate during the following work if it is fully closed.

Connect the refrigerant pipes (both liquid pipe and gas pipe) between the indoor and the outdoor units.

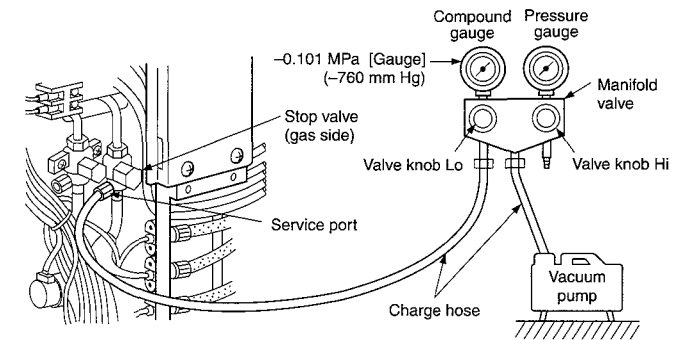
Remove the service port cap of the stop valve on the side of the outdoor unit gas pipe. (The stop valve will not work in its initial state fresh out of the factory (totally closed with cap on).)

Connect the gauge manifold valve and the vacuum pump to the service port of the stop valve on the side of the outdoor unit liquid pipe.

Run the vacuum pump.

Check the vacuum with the gauge manifold valve, then close the gauge manifold valve and stop the vacuum pump.

Leave as it is for one or two minutes. Make sure the pointer of the gauge manifold valve remains in the same position. Confirm that the pressure gauge shows -0.101 MPa [Gauge] (-760 mm Hg).



Remove the gauge manifold valve quickly from the service port of the stop valve.

Remove the cap from the stop valves of the outdoor unit, liquid pipe, and gas pipe. Pull the handle towards you with finger. Turn it one fourth turn counterclockwise to obtain the full-open position.

Tighten the cap to the service port to obtain the initial status.

Thrust the handle of the stop valve into the unit, then retighten the cap.

Leak test With a gas detector or soap water, check the flared nut connections for any refrigerant leak.

In case of refrigerant leak

- Retighten the flared nut connections.
- If the leak does not stop even after retightening, repair the leaking point, collect all from inside the unit through the service port, apply a vacuum to it, then charge a specified amount of gas with a gas cylinder.

⚠ WARNING:

When installing or moving the unit, do not mix anything other than specified refrigerant (R-22) into the refrigerating cycle.

If air is mixed, it may cause the refrigerating cycle to get abnormally high temperature, causing a risk of burst.

	Tightening torque	
	N·m	kgf·cm
Cap for service port	13.7 to 17.7	140 to 180
Cap for stop valve	19.6 to 29.4	200 to 300

5-5 EARTHING WORK

Put the earth circuit to the ground in accordance with “Technical Standards for Electrical Installation”.

⚠ CAUTION:

Do not connect the earth cable to any gas pipe, water pipe, lightning rod or telephone earth cable. If there is some deficiency in earthing work, it may cause a risk of electric shock.

The product incorporates a frequency inverter and so requires earthing in order to observe electric charge and noise caused by static electricity.

5-6 CHECKING AFTER INSTALLATION

After finishing the installation, check the following items again by making .

- Have special circuits been provided?
- Is power supply voltage as specified?
- Has indoor/outdoor connecting wire been inserted into terminal block?
- Has indoor/outdoor connecting wire been secured firmly?
- Has intermediary connection between power cable and indoor/outdoor connecting wire been carried out?
- Is combination of connection pipes and indoor/outdoor connecting wire correct (Room A, Room B, Room C, Room D)?
- Is earth cable connection correct?
- Has leak test been carried out?
- Has air purge been carried out?
- Is stop valve fully open?
- Has drain discharge been checked?
- Is insulation over connection pipe joints correct?
- Is strength of installation location well enough?
- Have all of ⚠ WARNING and ⚠ CAUTION items in “1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY” been checked?

5-7 GAS CHARGE

- ① Since this model is designed to contain refrigerant equivalent to the amount necessary for maximum total length of refrigerant piping, do not replenish the refrigerant when installing the unit at site.
- ② In case of charging the refrigerant gas into the refrigerant circuit again, vacuumize the refrigerant pipes and charge the appropriate amount of gas as mentioned on the spec name plate of outdoor unit.

5-8 TEST RUN

- Be sure to perform the test run for each unit. Make sure each indoor unit operates properly following the installation manual attached to the unit.
- If you perform the test run for all indoor units at once, you cannot detect any erroneous connection, if any, of the refrigerant pipes and the indoor/outdoor unit connecting wires.

About the restart protective mechanism

Once the compressor stops, the restart preventive device operates so the compressor will not operate for 3 minutes to protect the air conditioner.

5-9 EXPLANATION TO THE CUSTOMER

- Recommend the customer to read the OPERATING INSTRUCTIONS carefully.
- Using the OPERATING INSTRUCTIONS for each unit, explain the following to the customer, how to control temperature, how to remove the air filters, how to remove or put the remote controller in the remote controller mounting hardware, how to clean, precautions for operation, etc.

If the customer (user) is absent, explain to the purchaser (owner, building's controller, etc) about those points.

List of indoor unit combinations for the MXZ-32SV inverter-multi system

※Note : The MXZ-32SV requires a minimum of 2 indoor units.
MCFH-13NV and SEH-1.6AR are equivalent to the 12 class.
SEH-2AR is equivalent to the 18 class.

Combination (Models)	Mode	Capacity : kW					Combination (Models)	Mode	Capacity : kW				
		A	B	C	D	Total			A	B	C	D	Total
07	Cooling/Heating	2.2/3.2	—	—	—	2.2(0.9~2.7)/3.2(0.9~4.1)	09+09+09	Cooling/Heating	2.67/3.1	2.67/3.1	2.67/3.1	—	8.0(2.4~9.0)/9.3(2.1~11.6)
09	Cooling/Heating	2.8/4.0	—	—	—	2.8(0.9~3.2)/4.0(0.9~4.8)	09+09+12	Cooling/Heating	2.3/2.65	2.3/2.65	3.4/4.0	—	8.0(2.4~9.0)/9.3(2.1~11.6)
12	Cooling/Heating	4.0/6.0	—	—	—	4.0(0.9~4.5)/6.0(0.9~7.2)	09+09+18	Cooling/Heating	2.1/2.45	2.1/2.45	3.8/4.4	—	8.0(2.4~9.0)/9.3(2.1~11.6)
18	Cooling/Heating	5.0/7.1	—	—	—	5.0(0.9~5.4)/7.1(0.9~7.8)	09+12+12	Cooling/Heating	2.0/2.3	3.0/3.5	3.0/3.5	—	8.0(2.4~9.0)/9.3(2.1~11.6)
07+07	Cooling/Heating	2.2/3.2	2.2/3.2	—	—	4.4(1.8~5.4)/6.4(1.8~7.2)	09+12+18	Cooling/Heating	1.9/2.2	2.7/3.3	3.4/3.8	—	8.0(2.4~9.0)/9.3(2.1~11.6)
07+09	Cooling/Heating	2.2/3.2	2.8/4.0	—	—	5.0(1.8~5.8)/7.2(1.8~8.7)	09+18+18	Cooling/Heating	1.8/2.0	3.1/3.65	3.1/3.65	—	8.0(2.4~9.0)/9.3(2.1~11.6)
07+12	Cooling/Heating	2.2/3.2	4.0/5.4	—	—	6.2(1.8~6.6)/8.6(1.8~10.6)	12+12+12	Cooling/Heating	2.67/3.1	2.67/3.1	2.67/3.1	—	8.0(2.4~9.0)/9.3(2.1~11.6)
07+18	Cooling/Heating	2.2/2.8	5.0/6.2	—	—	7.2(1.8~7.7)/9.0(1.8~10.9)	12+12+18	Cooling/Heating	2.45/2.9	2.45/2.9	3.1/3.5	—	8.0(2.4~9.0)/9.3(2.1~11.6)
09+09	Cooling/Heating	2.8/4.0	2.8/4.0	—	—	5.6(1.8~6.2)/8.0(1.8~10.1)	07+07+07+07	Cooling/Heating	2.0/2.32	2.0/2.32	2.0/2.32	2.0/2.32	8.0(2.8~9.0)/9.3(2.8~11.6)
09+12	Cooling/Heating	2.8/3.5	4.0/5.3	—	—	6.8(1.8~7.3)/8.8(1.8~10.8)	07+07+07+09	Cooling/Heating	1.87/2.2	1.87/2.2	1.87/2.2	2.4/2.7	8.0(2.8~9.0)/9.3(2.8~11.6)
09+18	Cooling/Heating	2.8/3.35	5.0/5.95	—	—	7.8(1.8~8.5)/9.3(1.8~11.2)	07+07+07+12	Cooling/Heating	1.7/1.9	1.7/1.9	1.7/1.9	2.9/3.6	8.0(2.8~9.0)/9.3(2.8~11.6)
12+12	Cooling/Heating	4.0/4.65	4.0/4.65	—	—	8.0(1.8~8.8)/9.3(1.8~11.2)	07+07+07+18	Cooling/Heating	1.5/1.8	1.5/1.8	1.5/1.8	3.5/3.9	8.0(2.8~9.0)/9.3(2.8~11.6)
12+18	Cooling/Heating	3.5/4.3	4.5/5.0	—	—	8.0(1.8~8.8)/9.3(1.8~11.2)	07+07+09+09	Cooling/Heating	1.8/2.1	1.8/2.1	2.2/2.55	2.2/2.55	8.0(2.8~9.0)/9.3(2.8~11.6)
18+18	Cooling/Heating	4.0/4.65	4.0/4.65	—	—	8.0(1.8~8.8)/9.3(1.8~11.2)	07+07+09+12	Cooling/Heating	1.6/1.8	1.6/1.8	2.0/2.3	2.8/3.4	8.0(2.8~9.0)/9.3(2.8~11.6)
07+07+07	Cooling/Heating	2.2/2.87	2.2/2.87	2.2/2.87	—	6.6(2.4~8.1)/8.6(2.1~10.6)	07+07+09+18	Cooling/Heating	1.5/1.7	1.5/1.7	1.8/2.15	3.2/3.75	8.0(2.8~9.0)/9.3(2.8~11.6)
07+07+09	Cooling/Heating	2.2/2.75	2.2/2.75	2.8/3.5	—	7.2(2.4~8.6)/9.0(2.1~11.1)	07+07+12+12	Cooling/Heating	1.4/1.6	1.4/1.6	2.6/3.05	2.6/3.05	8.0(2.8~9.0)/9.3(2.8~11.6)
07+07+12	Cooling/Heating	2.1/2.4	2.1/2.4	3.8/4.5	—	8.0(2.4~9.0)/9.3(2.1~11.6)	07+07+12+18	Cooling/Heating	1.3/1.6	1.3/1.6	2.4/2.8	3.0/3.3	8.0(2.8~9.0)/9.3(2.8~11.6)
07+07+18	Cooling/Heating	1.9/2.2	1.9/2.2	4.2/4.9	—	8.0(2.4~9.0)/9.3(2.1~11.6)	07+09+09+09	Cooling/Heating	1.7/1.95	2.1/2.45	2.1/2.45	2.1/2.45	8.0(2.8~9.0)/9.3(2.8~11.6)
07+09+09	Cooling/Heating	2.2/2.7	2.8/3.3	2.8/3.3	—	7.8(2.4~8.9)/9.3(2.1~11.6)	07+09+09+12	Cooling/Heating	1.5/1.75	1.9/2.15	1.9/2.15	2.7/3.25	8.0(2.8~9.0)/9.3(2.8~11.6)
07+09+12	Cooling/Heating	1.9/2.25	2.5/2.8	3.6/4.25	—	8.0(2.4~9.0)/9.3(2.1~11.6)	07+09+09+18	Cooling/Heating	1.4/1.65	1.75/2.0	1.75/2.0	3.1/3.65	8.0(2.8~9.0)/9.3(2.8~11.6)
07+09+18	Cooling/Heating	1.7/2.1	2.3/2.6	4.0/4.6	—	8.0(2.4~9.0)/9.3(2.1~11.6)	07+09+12+12	Cooling/Heating	1.35/1.55	1.75/1.95	2.45/2.9	2.45/2.9	8.0(2.8~9.0)/9.3(2.8~11.6)
07+12+12	Cooling/Heating	1.8/2.0	3.1/3.65	3.1/3.65	—	8.0(2.4~9.0)/9.3(2.1~11.6)	09+09+09+09	Cooling/Heating	2.0/2.32	2.0/2.32	2.0/2.32	2.0/2.32	8.0(2.8~9.0)/9.3(2.8~11.6)
07+12+18	Cooling/Heating	1.6/1.85	2.8/3.4	3.6/4.05	—	8.0(2.4~9.0)/9.3(2.1~11.6)	09+09+09+12	Cooling/Heating	1.8/2.05	1.8/2.05	1.8/2.05	2.6/3.15	8.0(2.8~9.0)/9.3(2.8~11.6)
07+18+18	Cooling/Heating	1.5/1.7	3.25/3.8	3.25/3.8	—	8.0(2.4~9.0)/9.3(2.1~11.6)	09+09+09+18	Cooling/Heating	1.67/1.95	1.67/1.95	1.67/1.95	3.0/3.45	8.0(2.8~9.0)/9.3(2.8~11.6)
							09+09+12+12	Cooling/Heating	1.65/1.85	1.65/1.85	2.35/2.8	2.35/2.8	8.0(2.8~9.0)/9.3(2.8~11.6)

Rating conditions: Cooling; Indoor DB27°C WB19°C, Outdoor DB35°C/Heating; Indoor DB20°C, Outdoor DB7°C WB6°C