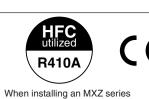
SPLIT-TYPE AIR CONDITIONERS

MSZ-A18 YV MSZ-A24 YV Series MSZ-A26 YV [FLARE CONNECTION TYPE]



outdoor unit, refer to the MSZ type manual for indoor unit set up.

### 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. Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR
- SAFETY" before installing the air conditione 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.

and attach the wires firmly to the terminal block connecting sections so

heater, space heater, stove, etc., harmful substances will be generated.

■ Perform electrical work according to the installation manual and be sure

- 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
- 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 do not leak after installation has com-If refrigerant gas leaks indoors, and comes into contact with the fire of a fan
- 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.
- to use an exclusive circuit. If the capacity of the power circuit is insufficient or there is incomplete
- 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 The use of defective parts could cause an injury or leakage of water due to a
- fire, an electric shock, the unit falling, etc. ■ Be sure to cut off the main power in case of setting up the indoor
- It could cause an electric shock. ■ The appliance shall be installed in accordance with national wiring

electronic control P.C. board or wiring works.

■ When installing or relocating the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit. Any presence of foreign substance such as air can cause abnormal pressure rise or an explosion.

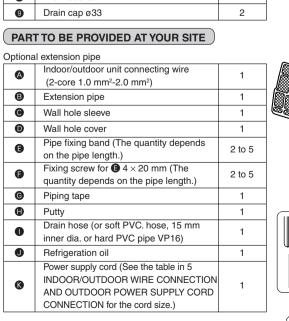
# 3. INSTALLATION DIAGRAM & ACCESSORIES

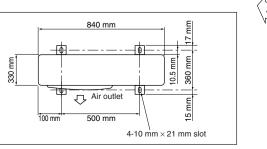
- This unit has flared connections on both indoor and outdoor sides.
- Refrigerant pipes are used to connect the indoor and outdoor units.

Limits	IVISZ-A 16/24/26
Pipe length	30 m max.
Height difference	15 m max.
No. of bends	10 max.
• Defiles and a discount	

410A) charge is required. (The outdoor unit is charged with refrigerant for pipe length up to 7 m.)

		Up to 7 m No ac		ditional charge is required.			
Pipe	length	Francisco Zum	Additional charge is required.				
		Exceeding 7 m	(Refer t	(Refer to the table below.)			
5 (		MSZ-A18	20 g/m × (refrigerant piping length (m) -				
Refrigerant to be added		MSZ-A24	20 g/m $\times$ (refrigerant piping length (m) -				
		MSZ-A26	55 g/m × (refrigerant piping length (m)				
Indoo 1	r unit> Installatio	n plate		1	72 mm or more 100 mm or or note by the and left back plping (using spacer)		
	r unit>				d left		
0		n plate fixing screw 4 ×	25 mm	7	or left		
8		ontroller holder	1	ore more fr (using			
4	•				m or m mm or r piping		
Battery (AAA) for remote controller     Wireless remote controller				2	72 m 100 r back		
				1			
	Felt tane (Lised for left or left-rear pining)						





# Earth the unit. earth. Defective earthing could cause an electric shock

- If gas leak and accumulate in the area surrounding the unit, it could cause an
- (Where it is humid). If an earth leakage breaker is not installed, it could cause an electric shock.
- If there is a defect in the drainage/piping work, water could drop from the unit
- Fasten a flare nut with a torque wrench as specified in this manual. When fastened too tight, a flare nut may broken after a long period and cause
- a leakage of refrigerant.

### 2. SELECTING THE INSTALLATION LOCATION

### 2-1 INDOOR UNIT

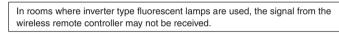
- Where cool air spreads over the entire room.
- and the difference of height of both units is 15 m. Rigid wall without vibration
- At a distance 1 m or more away from your TV and radio. Operation of the air conditioner interferes with radio or TV reception in areas where reception is weak.
- the infrared remote control can operate the air conditioner normally). Where the air filter can be removed and replaced easily.
- Where it is not exposed to strong wind. Where airflow is good and dustless.
- Where neighbours are not annoyed by operation sound or hot air.
- 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. Operation of the air conditioner interferes with radio or TV reception in areas where reception is
- weak. An amplifier may be required for the affected device. Install the unit horizontally. • Please install it in an area not affected by snowfall or blowing snow. In areas with

ransmitted from there.

- Where flammable gas could leak.
- Where sulfide gas is generated such as a hot spring.
   Where there is high-frequency or wireless equipment.

# Place of mounting

pillar or wall and set the wireless remote controller 6.



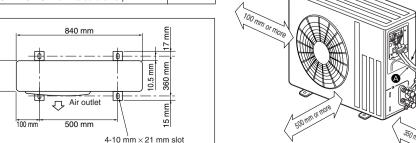
- Remove the outdoor units valve cover, then connect the pipe.
- Be careful not to crush or bend the pipe in pipe bending.

Limits	MSZ-A18/24/26
Pipe length	30 m max.
Height difference	15 m max.
No. of bends	10 max.

Refrigerant adjustment ... If pipe length exceeds 7 m, additional refrigerant (R-

ength	Exceeding 7 m	Additional charge is required. (Refer to the table below.)				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.		
	MS7-Δ18					, 113		
erant to						Decide the installation position using mark on the installation		
ded	_				1	plate indicating the indoor unit size as reference.		
he following	s		(reingerant	^	J			
	1-4-					• • • • • • • • • • • • • • • • • • • •		
	•		1	left al				
motamation plate many coron 17720 mm			sing s	or mou ou mou mou mou mou mou mou mou mou	Be careful the			
Remote controller holder 1			0m no 120		drain hose is not raised.			
Fixing screw for 3 3.5 × 16 mm (Black) 2			mm o mid x					
Battery (AAA) for remote controller 2			100 100 100 100	TREE BY				
Wireless remote controller 1								
Felt tape (	(Used for left or left-rear	piping)	1					
or unit>					2	200 mm or more  Piping can be directed towards rear, right downward left or left rear		
Drain soc	ket		1			Piping can be directed towards rear, right, downward, left or left-rear		
Drain cap	ø33		2			directions.		
		SITE				Rear side Right		
Optional extension pipe						Rear		
Indoor/outdoor unit connecting wire (2-core 1.0 mm²-2.0 mm²)		1		<b>&gt;&gt;&gt;</b>	Downward Left-rear			
	he following unit> Installatio Installatio Remote c Fixing scr Battery (A Wireless I Felt tape I Or unit> Drain soc Drain cap  TTO BE P Il extension Indoor/ou	ESSORIES  MSZ-A18  MSZ-A24  MSZ-A26  ESSORIES  The following parts before installation units  Installation plate Installation plate fixing screw 4 × 2  Remote controller holder  Fixing screw for 3.5 × 16 mm (I)  Battery (AAA) for remote controller  Wireless remote controller  Felt tape (Used for left or left-rear or units)  Drain socket  Drain cap ø33  TTO BE PROVIDED AT YOUR  Il extension pipe Indoor/outdoor unit connecting wing the service of the ser	Exceeding 7 m  (Refer to MSZ-A18	Exceeding 7 m  (Refer to the table table to the table table to the table to the table table to the table table to the table table table table table	Exceeding 7 m  (Refer to the table below.)  MSZ-A18  20 g/m × (refrigerant piping length (m) -7)  MSZ-A24  20 g/m × (refrigerant piping length (m) -7)  MSZ-A26  55 g/m × (refrigerant piping length (m) -7)  ESSORIES  The following parts before installation.  Installation plate  Installation plate fixing screw 4 × 25 mm  Remote controller holder  Fixing screw for 3.5 × 16 mm (Black)  Battery (AAA) for remote controller  Vireless remote controller  Felt tape (Used for left or left-rear piping)  Drain socket  Drain cap Ø33  TO BE PROVIDED AT YOUR SITE  Index or unit to the table below.)  (Refer to the table below.)	Exceeding 7 m  (Refer to the table below.)  MSZ-A18  20 g/m × (refrigerant piping length (m) -7)  MSZ-A24  20 g/m × (refrigerant piping length (m) -7)  MSZ-A26  55 g/m × (refrigerant piping length (m) -7)  ESSORIES  The following parts before installation.  Installation plate  Installation plate  Installation plate fixing screw 4 × 25 mm  Fixing screw for 3.5 × 16 mm (Black)  Battery (AAA) for remote controller  Felt tape (Used for left or left-rear piping)  Drain socket  Drain cap ø33  TO BE PROVIDED AT YOUR SITE  Indoor/outdoor unit connecting wire  Installation plate fixing screw 1  Installation plate fixing screw 4 × 25 mm  To BE PROVIDED AT YOUR SITE  Indoor/outdoor unit connecting wire  1		

PAR	T TO BE PROVIDED AT YOUR SITE		Rear side Right	
Optiona	al extension pipe		Rear	
A	Indoor/outdoor unit connecting wire (2-core 1.0 mm²-2.0 mm²)	1	Down	ward Left-rear
В	Extension pipe	1		Lock the catch.
0	Wall hole sleeve	1	Note: Do not obstruct the	
O	Wall hole cover	1	air outlet.	
•	Pipe fixing band (The quantity depends on the pipe length.)	2 to 5		
•	Fixing screw for <b>1</b> 4 × 20 mm (The quantity depends on the pipe length.)	2 to 5		
G	Piping tape	1		
•	Putty	1	6 9 6	the 2 connecting pipes and
0	Drain hose (or soft PVC. hose, 15 mm inner dia. or hard PVC pipe VP16)	1		lation individually.
0	Refrigeration oil	1		$\bigcirc$
0	Power supply cord (See the table in 5 INDOOR/OUTDOOR WIRE CONNECTION AND OUTDOOR POWER SUPPLY CORD	1	8 mm thic	kness thermal insulation



# Do not connect the earth to a gas pipe, water pipe, lightning rod or telephone ■ Do not install the unit in a place where an inflammable gas leaks.

■ Install an earth leakage breaker depending on the installation place

**⚠** CAUTION

- Perform the drainage/piping work securely according to the installation
- and household goods could be wet and damaged.

### Drill a 75 mm hole so that outside can be lower than inside. Insert the wall hole sleeve **©**.

# Where airflow is not blocked

- Maximum refrigerant piping length between indoor unit and outdoor unit is 30 m
- Where it is not exposed to direct sunshine
- Where easily drained.
- An amplifier may be required for the affected device.
- In a place as far away as possible from fluorescent and incandescent lights (so
- 2-2 OUTDOOR UNIT

- Where it is not exposed to rain and direct sunshine.
- Where rigid wall or support is available to prevent the increase of operation sound

- heavy snow, please install a canopy, a pedestal and/or some baffle boards.

It is advisable to make a piping loop near outdoor unit so as to reduce vibration

- **⚠** CAUTION Avoid the following places for installation where air conditioner trouble is liable to occur.
- Where there is much machine oil. Salty places such as the seaside
- 2-3 WIRELESS REMOTE CONTROLLER MOUNTING
- Where it is easy to operate and easily visible. Where children can not touch.
- Select a position about 1.2 m above the floor, check that signals from the remote controller are surely received by the indoor unit from that position ('beep' or 'beepbeep' receiving tone sounds). After that, attach remote controller holder 3 to a

# PIPING PREPARATION

# Use the refrigerant pipes that meet the following specifications.

- INSTALLATION INFORMATION FOR THE AIR CONDI-**TIONER WITH R410A REFRIGERANT**  This room air conditioner adopts an HFC refrigerant (R410A) which will never destroy A18/A24 6.35 Heat resisting A26 Pay particular attention to the following points, though the basic installation procedure 9.52 foam plastic is same as that for R22 air conditioner A18 12.7 0.045 specific
- As R410A has a working pressure approx. 1.6 times as high as that of R22, some gravity A24/A26 15.88 pecial tools and piping parts / materials are required. (Refer to the table below.) Use a copper pipe or a copper-alloy seamless pipe with a thickness of 0.8 mm (for Take sufficient care not to allow water and other contaminations to enter the ø6.35, 9.52) or 1.0 mm (for ø12.7, ø15.88). Never use any pipe with a thickness less R410A refrigerant during storage and installation, since it is more susceptible to than 0.8 mm (for ø6.35, 9.52) or 1.0 mm (for ø12.7, ø15.88), as the pressure ontaminations than R22.
- resistance is insufficient. Ensure that the 2 refrigerant pipes are insulated to prevent condensation 3 Refrigerant pipe bending radius must be 100 mm or more.

**↑** CAUTION

R410A tools	Can R22 tools be used?	Description
Gauge manifold	No	R410A has high pressures beyond the urement range of existing gauges. Port diameters have been changed to any other refrigerant from being charged unit.
Charge hose	No	Hose material and cap size have been c to improve the pressure resistance.
Gas leak detector	No	Dedicated for HFC refrigerant.
Torque wrench	Yes	1/4 and 3/8
	No	1/2 and 5/8
Flare tool	Yes	Clamp bar hole has been enlarged to re the spring strength in the tool.
Flare gauge	New	Provided for flaring work (to be used w flare tool).
Vacuum pump adaptor	New	Provided to prevent the back flow of cadapter enables you to use existing upumps.
Electronic scale		It is difficult to measure R410A with a cl

No: Not substitutable for R410A Yes: Substitutable for R410A

# 6-2 FLARING WORK

Electronic scale for refrigerant

wall containing metals (tin plated) or

between the wall and the piping or rap 7 to 8 turns of insulation vin

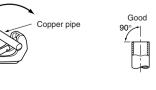
Units should be installed by licensed contractor

according to local code requirement

netal netting, use a chemically treate

 Main cause of gas leakage is defect in flaring work. Carry out correct flaring work in the following procedure.

# D Pipe cutting · Cut the copper pipe correctly with pipe cutter.

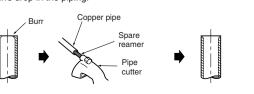


### Burrs removal Completely remove all burrs from the cut cross section of pipe. Put the end of the copper pipe to downward direction as you remove burrs in order to

avoid to let burrs drop in the piping.

cylinder because the refrigerant bubbles due to

high pressure and high-speed vaporization.



# 4-3 CONNECTING WIRE SPECIFICATIONS

Cable 2-core 1.0 mm<sup>2</sup>, in conformity

with Design 245 IEC 57.

Use special room air conditioning circuit.

Power supply cord length

### 4-1 FIXING OF INSTALLATION PLATE

4. INDOOR UNIT INSTALLATION

plate 1 using  $11 \times 20 \cdot 11 \times 26$  oval hole (450 mm pitch).

Repeat the same procedure for the left hole.

Be sure to use wall hole sleeve **()** to prevent the outdoor connecting wires from

gap with putty 

.

6. INDOOR/OUTDOOR UNIT CONNECTION

For refrigerant piping, use clean, pressure-proof parts / materials specifically

Ocmposition change may occur in R410A since it is a mixed refrigerant. When

6-1 Tools dedicated for the air conditioner with R410A

The diameter of the service port on the stop valve in outdoor unit has been changed to

The following tools are required for R410A refrigerant. Some R22 tools can be

charging, charge liquid refrigerant to prevent composition change.

FINISHING AND TEST RUN

designed for R410A. (Refer to 2. Refrigerant piping.)

refrigerant

substituted for R410A tools

Fix the pipe to wall with

pipe fixing band 1.

contacting with metal part in the wall and to prevent damage by rat in case the wall

extra length.

as indicated by the arrows 1.

4-2 WALL HOLE DRILLING

Positioning of the holes on the wall

(Wall hole cross section

Wall hole sealing and fixing pipe to wall

Determine the wall hole position

• Find a structural material (such as a stud) in the wall and fix installation plate (Lead to left/Lead to right) Indoor/outdoor unit connecting 100 mm or more for left wire Specification

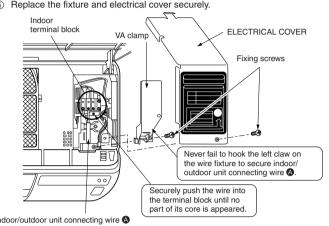
Take out power supply cord from the left or right bottom corner of the indoor unit. Connect to the power switch which has a gap of 3 mm or more when open to nterrupt the source power phase When the power switch is shut off, it must interrupt all phases.) (Input capacity Main switch/Fuse : 10 A) This plug has to be the one meets the Standards. Power supply cord Green/Yellow : Ground Blue : N **N** WARNING o prevent the installation plate from vibrating, be sure to fix the holes

It may cause a fire. When bolts recessed in the concrete wall are to be utilized, secure the installation Do not bundle the spare wire, but put it as shown below If the recessed bolt is too long, change it for a shorter one available in the market.

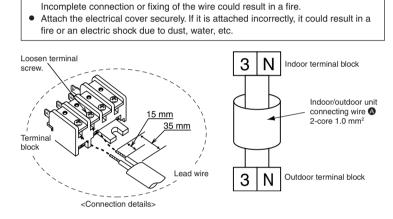
### 4-4 INDOOR AND OUTDOOR CONNECTING WIRE CON-NECTION

Never cut the indoor and outdoor unit connecting wire and connect it to other wires.

- You can connect indoor/outdoor lead wire without removing the front panel. Open the front panel. Remove one screw holding the electrical cover, then remove the cover. Remove the VA clamp and the cord clamp.
- Pass the indoor/outdoor unit connecting wire from the back of the indoor unit and process the end of the wire, then connect it to the terminal block. Replace the fixture and electrical cover securely.



**↑** 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.



Remove flare nuts attached to indoor and outdoor Flare nut

inch

1/4

5/8

0 to 0.5

0 to 0.5

0 to 0.5

0 to 0.5

Even length

Connect both liquid and gas pipings to indoor unit.

ø9.52 mm 34.3 to 41.2 350 to 420

ø15.88 mm 73.5 to 78.4 750 to 800

Fasten a flare nut with a torque wrench as specified in the table below.

Apply a thin coat of refrigeration oil on the seat surface of pipe.

49.0 to 56.4 500 to 575

When fastened too tight, a flare nut may broken after a long period and cause a leakage

For connection first align the center, then tighten the first 3 to 4 turns of flare nut.

Connect pipes to stop valve pipe joint of the outdoor unit in the same manner applied for

temperature and humidity are high, wind additional commercially sold insulation for

• For tightening, use a torque wrench or spanner and use the same tightening torque

For outdoor unit side, surely insulate every piping including valves. Using piping tape **G**, apply taping starting from the entry of outdoor unit. Stop the end of piping tape @ with tape (with adhesive agent attached). When piping have to be arranged through above ceiling, closet or where the

 Use tightening torque table below as a guideline for indoor unit side union joint section, and tighten using two wrenches. Excessive tightening damages the flare

· Compare the flared work with figure below.

6-3 PIPE CONNECTION

Indoor unit connection

Outdoor unit connection

applied for indoor unit.

**INSULATION AND TAPING** 

prevention of condensation

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

· If flare is noted to be defective, cut off the flared section and do flaring work again

1.0 to 1.5

1.0 to 1.5

1.0 to 1.5

Smooth all around Inside is shining without any scratches

· Carry out flaring work using flaring tool as shown below

units, then put them on pipe having completed

(not possible to put them on after flaring work)

Flare nut for R410A pipe differs from R22 pipe.

Refer to the following table for detail.

ø6.35

ø9.52

ø12.7

ø15.88

4 Flaring work

ø6.35 mm

ø9.52 mm

ø12.7 mm

ø15.88 mm

5 Check

of refrigerant.

Pipe diameter ø6.35 mm

 When the units of these models are shipped from the factory, auto restart function is set to ON. If you want to know how to release this function, consult the service

Firmly tighten the terminal screws to prevent them from loosening.

After tightening, pull the wires lightly to confirm that they do not move.

If an earth is incorrect, it may cause an electric shock.

4-5 AUTO RESTART FUNCTION

**↑** CAUTION

If the connecting wire is incorrectly connected to the terminal block, the unit does

• When the indoor unit is controlled with the remote controller, the operation mode, the set temperature, and the fan speed are memorized by the indoor electronic control P.C. board. The auto restart function sets to work the moment the power has restored after power failure, then, the unit will restart automatically. If the unit is operated in "I FEEL CONTROL" mode before power failure, the operation is not memorized. In "I FEEL CONTROL" mode, the operation is decided by the initial room temperature at

# ① If the main power (230V AC) has been cut, the operation settings remain.

Be careful not to make mis-wiring.

not operate normally.

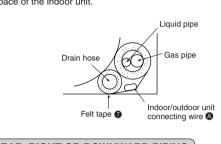
 $\ensuremath{\textcircled{2}}$  When three minutes have passed after power was restored, the unit will restart automatically according to the memory.

• The operation settings are memorized when 10 seconds have passed after the remote controller was operated • If the main power is turned off or a power failure occurs while AUTO START/STOP

- timer is active, the timer setting is cancelled. As these models are equipped with the auto restart function, the air conditioner should start operating at the same time that
- If the unit has been off with the remote controller before power failure, the auto restart function does not work as the power button of the remote controller is off. • To prevent breaker off due to the rush of starting current, systematize other home

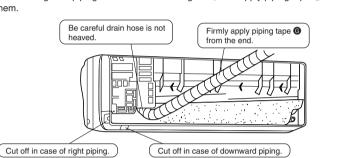
# 4-6 PIPE FORMING

- Place the drain hose below the refrigerant piping. • Make sure that the drain hose is not heaved or snaked.
- Do not pull the hose to apply the tape. • When the drain hose passes the room, be sure to wrap insulation material (obtain-
- able at a store) around it. • Wrap the felt tape \* around the pipe and the drain hose, then put the pipe in the back space of the indoor unit.



# FOR REAR, RIGHT OR DOWNWARD PIPING

Put the refrigerant piping and the drain hose together, then apply piping tape 6 to



• Insert the piping and the drain hose into the wall hole sleeve (a), and hook the upper part of the indoor unit on the installation plate 1. • Check if the indoor unit is hooked securely on the installation plate • by moving the

PURGING PROCEDURES

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

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 it initial state fresh out of the factory (totally

Connect the gauge manifold valve and the vacuum pump to the service port of the

Check the vacuum with the gauge manifold valve, then close the gauge manifold

Leave as it is for one or two minutes. Make sure the pointer gauge manifold valve

remains in the same position. Confirm that the pressure gauge shows-0.101 Mpa

-0.101MPa Compound press

valve (for R410A Handle High

back flow)

(or the vacuu

Window pump with the function to

Adapter for prevent the

Stop valve (-760 mmHg) gauge (for R410A)

Pipe length exceeding 7 m

of gas. (refer to 3)

Charge the prescribed amount

kaf.cm

140 to 180

200 to 300

(for R410A)

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

After refrigerant pipes are connected and evacuated, fully open all stop valves on

Operating without fully opening lowers the performance and this causes trouble.

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

Retighten the car

Leak test

N⋅m

13.7 to 17.7

19.6 to 29.4

Tightening torque

unit to left and right. • Thrust the lower part of the indoor unit into the installation plate •

6-4 PURGING PROCEDURES-LEAK TEST

stop valve on the gas pipe side of the outdoor unit.

Run the vacuum pump. (Vacuumize for more than 15 minutes.

and the outdoor unit.

closed with cap on).)

\*4 to 5 turns

Pipe length up to 7 m

No gas charge is needed.

Cap for service port

Cap for stop valve

1.5 to 2.0

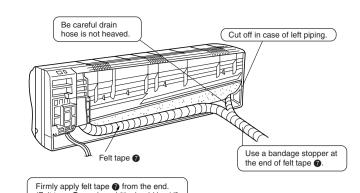
1.5 to 2.0

2.0 to 2.5

2.0 to 2.5

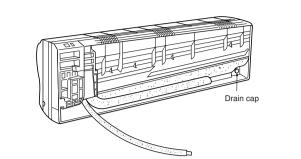
# FOR LEFT OR LEFT-REAR PIPING

 Pipe arrangement Put the refrigerant piping and the drain hose together, then apply felt tape **7** to them.

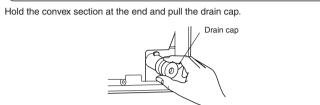


# (Felt tape of overlap width should be 1/3 the tape width.)

### Be sure to reattach the drain hose and the drain cap in case of left or left-rear piping. Otherwise, it could cause drops of water to drip down from the drain hose



# 1) Pull out the drain cap at the rear right of the indoor unit.



# Pull out the drain hose at the rear left of the indoor unit.

Hold the claw marked by the arrow and pull out the drain hose forward

insert the cap fully into the drain pan.

Before performing the test run, recheck any wrong wiring.

tinuous operation) for 30 minutes.

PROCEDURE `

Perform test run in the following procedure.

Press the EMERGENCY OPERATION switch.

Press it once more, and the operation stops

OPERATION switch is pressed.

warm air blows out.

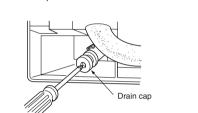
the remote controller.

ndoor/outdoor unit connecting wire A for mis-wiring.

Press it once more, and the EMERGENCY HEAT MODE starts.

### 3) Put the drain cap into the section to which the drain hose is to be attached at the rear of the indoor uni

Insert the screwdriver, etc. (not sharp-edged tool) into the hole at the end of the cap and



Wrong wiring prevents normal operation or results in blown fuse disabling operation.

EMERGENCY OPERATION switch is once pressed, the unit will start the test run (con-

A thermostat does not work during this time. After 30 minutes the unit will start the

EMERGENCY OPERATION at a fixed temperature setting of 24°C in COOL MODE or

Press it once, and after test run for 30 minutes the EMERGENCY COOL MODE starts.

If the left side lamp of the operation indicator blinks every 0.5 seconds, inspect the

(The operation mode changes in order of 1 ~ 3 every time the EMERGENCY

In starting the heating operation, indoor unit fan may not operate to prevent blowin

Checking the remote (infrared) signal reception

will not operate for three minutes to protect the air conditioner.

6-6 EXPLANATION TO THE CUSTOMER

cool air. Please wait for a few minutes until the temperature of heat exchanger rises and

Press the ON/OFF button on the remote controller and check that an electronic sound is

heard from the indoor unit. Press the ON/OFF button again to turn the air conditioner off.

If the indoor unit is operated with the remote controller, both the test

Once the compressor stops, the restart preventive device operates so the compressor

Using the OPERATING INSTRUCTIONS, 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 holder, how to clean, precautions for operation, etc. • Recommend the customer to read the OPERATING INSTRUCTIONS carefully.

run and the emergency operation are released by commands from

The test run can be started by pressing EMERGENCY OPERATION switch. When the

# 4 Insert the drain hose into the section to which the drain hose is

• Insert the drain hose into the wall hole sleeve (a), and hook the upper part of

indoor unit on the installation plate 1. Then, move the unit to the very edge of the

left side for putting the piping easily in the back space of the indoor unit. After that

cut the part of packing material (spacer assembly) to hook it on the back rib and

Securely attach the spacer

assembly in the concave par

direction is correct as shown in

of the rib, taking care its

(Fig. 2)

• If the drain hose provided with the indoor unit is too short, connect it with drain

• If the extension drain hose has to pass through a room, be sure to wrap it with

the projection of its inserting part at the drain pan

lift the indoor unit as shown in the figure below.

Connect the refrigerant piping with the extension pipe

Do not make drain piping as shown in Fig. 2 to 5.

Thrust the lower part of the indoor unit into the installation plate

• The drain hose should point downward for easy drain flow. (Fig. 1)

Cut part of packing material (spacer assembly) to hook it on the back rib.

Spacer assembl

4-7 DRAIN PIPING

(Fig. 1)

(Fig. 4)

hose dipped

hose **1** that should be provided at your site.

commercially sold insulation.

INDOOR UNIT INSTALLATION

Insert the drain hose fully into the drain pan. Check if the hose is hooked securely to INDOOR/OUTDOOR UNIT CONNECTING WIRE CON-

20 A

CONNECTION

5. OUTDOOR UNIT INSTALLATION

NECTION AND OUTDOOR POWER SUPPLY CORD

• Connect the indoor/outdoor unit connecting wire **(A)** from the indoor unit correctly on the terminal block. • For future servicing, give extra length to connecting wire. Rated Voltage Breaker capacity Connect to the supply terminals and leave a contact separation of at least 3 mm at each pole to disconnect the source power pole. (When the power switch

> Peel off both ends of connecting wire (extension wire) When too long, or connected by cutting off the middle, peel off power supply wire to the size as shown in the Be careful not to contact connecting wire with piping. Make earth wire a little longer than the others. (more than 35 mm)

is shut off, it must disconnect all poles.)

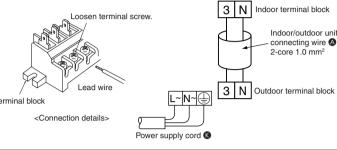
to use the ones in compliance with the standards. • Be sure to push the core until it is hidden and pull each cable to make sure that it is not pulled up incomplete insertion may cause a risk of burning the terminal 3-core 2.5 mm<sup>2</sup> or more, in conformity

• For the power supply cord and the indoor/outdoor unit connecting wires, be sure

	with Design 245 IEC 57.	10 111 01 1655	
Power supply cord	3-core 4.0 mm <sup>2</sup> or more, in conformity	15 m or less	
Specification	with Design 245 IEC 57.	15 III OI less	
	3-core 6.0 mm <sup>2</sup> or more, in conformity	0F m or loss	
	with Design 245 IEC 57.	25 m or less	
Indoor and Outdoor connecting	Cable 2-core 1.0 mm², in conformity with		

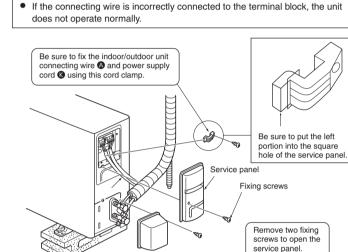
wire Specification

 A means for disconnection of the supply with an isolation switch, or simila device. in all active conductors shall be incorporated in the fixed wiring. Never cut the power cord and connect it to other wires. It may cause a fire.



**↑** CAUTION

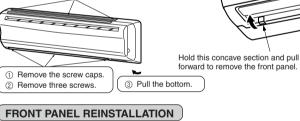
 Use care not to make mis-wiring. • Firmly tighten the terminal screws to prevent them from loosening. • After tightening, pull the wires lightly to confirm that they do not move.



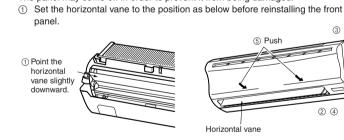
Be sure to attach the service panel of the outdoor unit securely. If it is not attached

7-1 REMOVING AND REINSTALLING THE FRONT PANEL FRONT PANEL REMOVAL 4 Release the hooks

7. FOR MOVEMENT AND MAINTENANCE



Do not open the front panel up beyond the level position. The panel may come off in order to prevent it from being damaged



Attach the bottom of the front panel under the horizontal vane. Fit in the top of the front panel Fit in the bottom of the front panel and tighten it using screws. ⑤ Push the section of the front panel marked by the arrow and fit the panel into the

Remove the bottom of the indoor unit from the installation plate.

7-2 REMOVING THE INDOOR UNIT

### Remove the front panel. (See FRONT PANEL REMOVAL shown above.) Insert flat screwdrivers into the square holes at the left and right bottom of the indoor unit and push them up; the bottom of the indoor unit goes down and the hooks are released.

7-3 GAS CHARGE Connect gas cylinder to the service port of stop valve (3-way). Execute air purge of the pipe (or hose) coming from refrigerant gas cylinder. Replenish specified amount of the refrigerant, while operating the air conditioner

correctly, it could result in a fire or an electric shock due to dust, water, etc.

In case of adding refrigerant, comply with the quantity specified for the refrigerating

### **↑** CAUTION Do not discharge the refrigerant into the atmosphere.

Take care not to discharge refrigerant into the atmosphere during installation reinstallation, or repairs to the refrigerant circuit. For additional charging, charge the refrigerant from liquid phase of the gas cylinder.

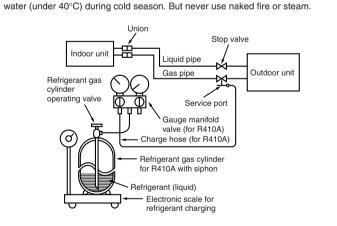
If the refrigerant is charged from the gas phase, composition change may

ability of the refrigerating cycle decreases or normal operation can be

occur in the refrigerant inside the cylinder and the outdoor unit. In this case,

impossible. However, charging the liquid refrigerant all at once may cause the

compressor to be locked. Thus, charge the refrigerant slowly. To maintain the high pressure of the gas cylinder, warm the gas cylinder with warm



### This product is designed and intended for use in the residential, commercial and ght-industrial environmen

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# MITSUBISHI ELECTRIC CORPORATION

The product at hand is based on • Low Voltage Directive 73/23/ EEC the following EU regulations: • Electromagnetic Compatibility Directive 89/336/