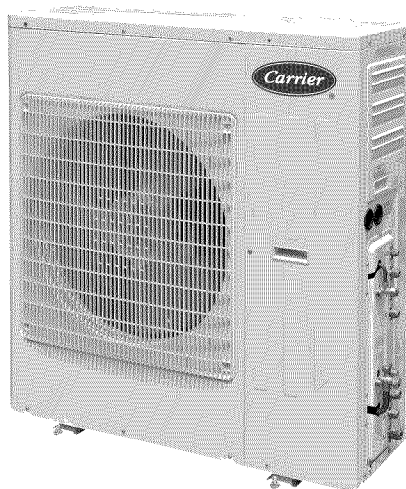


Owner's Manual & Installation Instructions

TABLE OF CONTENTS



NOTE: Read the entire instruction manual before starting the installation.

	PAGE
SAFETY CONSIDERATIONS	2
SYSTEM REQUIREMENTS	2
Preface	3
2 Product Introduction	4
2.1 Name of Main Parts	4
2.2 Combinations for outdoor and indoor units	5
2.3 Rated working condition	6
2.4 The range of production working temperature	6
3 Preparation before Installation	7
3.1 Standard parts	7
3.2 Selecting installation site	7
3.3 Piping Connection	8
4 Installation	9
4.1 Outline and dimension of the outdoor unit	9
4.2 Installation of the Connection Pipe	10
4.3 Air Purginand Refrigerant Charge	14
4.4 Electric Wiring	15
5 Troubleshooting	17
6 The conditions listed below are not classified into errors	18
7 Troubleshooting	20
8 Maintenance	21

NOTE TO EQUIPMENT OWNER:

Please read this Owner's Information Manual carefully before installing and using this appliance and keep this manual for future reference.

For your convenience, please record the model and serial numbers of your new equipment in the spaces provided. This information, along with the installation data and dealer contact information, will be helpful should your system require maintenance or service.

UNIT INFORMATION

Model # _____

Serial # _____

INSTALLATION INFORMATION

Date Installed _____

DEALERSHIP CONTACT INFORMATION

Company Name: _____

Address: _____

Phone Number: _____

Technician Name: _____

SAFETY CONSIDERATIONS


Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.).

Only trained, qualified installers and service mechanics should install, start-up, and service this equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils. All other operations should be performed by trained service personnel.

When working on the equipment, observe precautions in the literature and on tags, stickers, and labels attached to the equipment.

Follow all safety codes. Wear safety glasses and work gloves. Keep quenching cloth and fire extinguisher nearby when brazing. Use care in handling, rigging, and setting bulky equipment.

Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and National Electrical Code (NEC) for special requirements. Recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words: DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.



WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.



WARNING



EXPLOSION HAZARD

Failure to follow this warning could result in death, serious personal injury, and/or property damage.

Never use air or gases containing oxygen for leak testing or operating refrigerant compressors. Pressurized mixtures of air or gases containing oxygen can lead to an explosion.



CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Do not bury more than 36 in. (914 mm) of refrigerant pipe in the ground. If any section of pipe is buried, there must be a 6 in. (152 mm) vertical rise to the valve connections on the outdoor units. If more than the recommended length is buried, refrigerant may migrate to the cooler buried section during extended periods of system shutdown. This causes refrigerant slugging and could possibly damage the compressor at start-up.

SYSTEM REQUIREMENTS

Allow sufficient space for airflow and servicing unit. See minimum required distances between unit and walls or ceilings.

Recommended Connection Method for Power and Communication Wiring (To minimize communication wiring interference)

Power Wiring:

The main power is supplied to the outdoor unit. The field supplied connecting cable from the outdoor unit to indoor unit consists of three (3) wires and provides the power for the indoor unit. Two wires are high voltage AC power and one is a ground wire.

Consult your local building codes and the NEC (National Electrical Code) or CEC (Canadian Electrical Code) for special requirements.

All wires must be sized per NEC or CEC and local codes. Use Electrical Data table MCA (minimum circuit amps) and MOCP (maximum over current protection) to correctly size the wires and the disconnect fuse or breakers respectively.

Per caution note, only copper conductors with a minimum 300 volt rating and 2/64-inch thick insulation must be used.

Communication Wiring:

A separate shielded copper conductor only, with a minimum 300 volt rating and 2/64-inch thick insulation, must be used as the communication wire from the outdoor unit to the indoor unit.

To minimize voltage drop of the control wire, use the following wire size and maximum lengths shown in the chart below:

Wire Size	Length ft (m)
18 AWG	50 (15)
16 AWG	50 (15) to 100 (30)



CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

- Wires should be sized based on NEC and local codes.
- Use copper conductors only with a minimum 300 volt rating and 2/64 inch thick insulation.

Preface

Please carefully read the instructions in this manual before installation and operation.

(1) This unit measures on the base of UL1995.

(2) Multi-zone air conditioning units confirm to design standard: AHRI 210240-2008.

(3) For personal safety, please follow the instructions provided in this manual.

(4) The total capacity of the indoor units , which run at the same time, can not exceed that of the outdoor units; otherwise, the cooling (heating) effect of each indoor unit would be poor.

Model	38GJQF30---3	38GJQG36---3	38GJQG42---3
Minimum number of connectable indoor units	2	2	2
Maximum number of connectable indoor units	4	5	5
Minimum capacity of connectable indoor units	18KBtu	18KBtu	18KBtu
Maximum capacity of connectable indoor units	42KBtu	48KBtu	51KBtu

(5) Switch the main power on eight hours before starting the unit to ensure a successful startup.

(6) It is normal for the indoor unit to run 20-70 seconds after the indoor unit receives the“stop” signal to make full use of the after heat function for the next operation.

(7) When the running modes of the indoor and outdoor units conflict, the conflict appears on the wired controller display in five seconds and then the indoor unit will stop. In this case, they revert to the normal condition by synchronizing their running modes: the cooling mode is compatible with the dehumidifying mode and the fan mode can work with any other mode. If the supply power fails when the unit is running, the indoor unit sends the“start” signal to the outdoor unit three minutes after power recovery.

(8) Cautions for the Debugging and Maintenance Personnel:

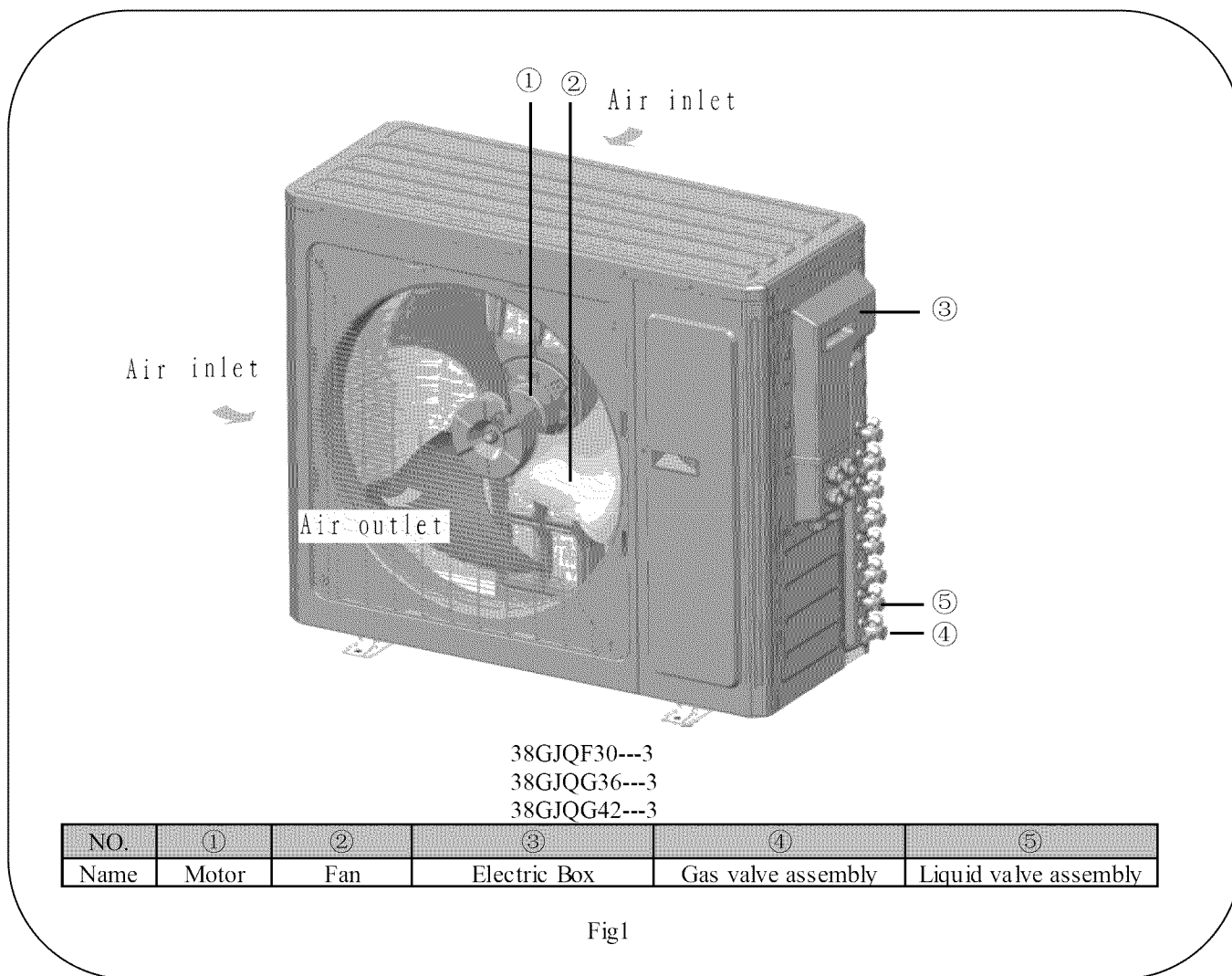
During debugging and maintenance, prior to the startup of the compress, ensure the heating belt of the compressor has been powered for at least eight hours.

Once the compressor starts, it must work continuously for at least 30 minutes. If not, it may be damaged.

2 Product Introduction

The 38GJ system adopts inverter compressor technology. According to change displacement of compressor, stepless capacity regulation within range of 15%~120% can be realized. Various product lineup is provided with capacity range from 30KBtu to 42KBtu, which can be widely used in a boarding house , a working area and especially applicable in a location with a variable load change.

2.1 Name of Main Parts



2.2 Combinations for outdoor and indoor units

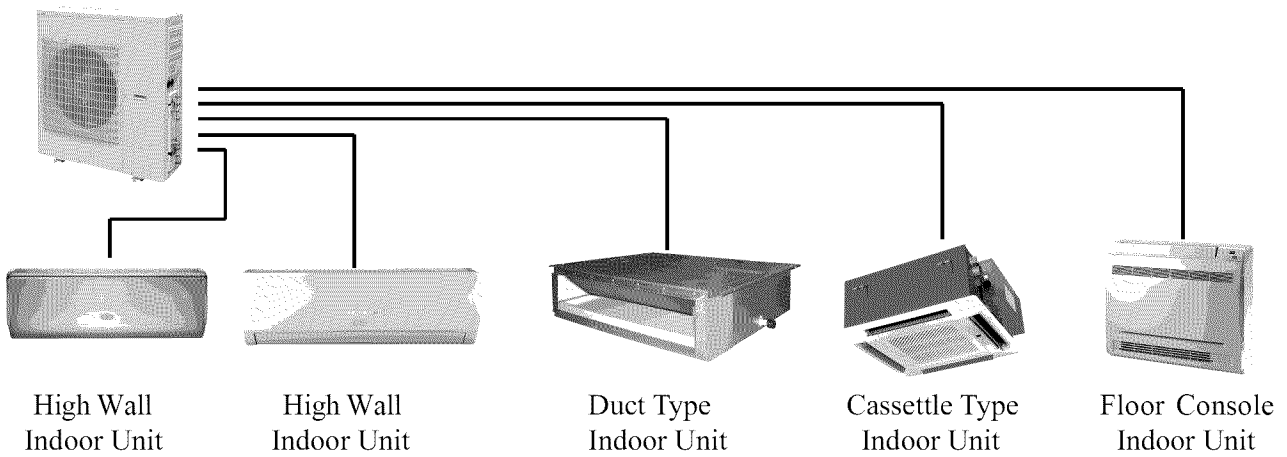


Fig 2

See Fig.2 for combinations for outdoor and indoor units. For the GJ series air conditioning system, one outdoor unit is able to drive up to five indoor units which can be cassette type, duct type, high wall or floor console type. The outdoor unit will run as long as any one indoor unit receives the running command, and all indoor units stop once the outdoor unit is turned off.

Table 1 Energy Level and Capacity Code of the Indoor

Indoor Unit	Nominal Unit Btuh	Indoor Model Number	Outdoor Model Number
High Wall 40GR	9,000	40GRQB09B--3	38GJQF30---3 38GJQG36---3 38GJQG42---3
	9,000	40GRQB09H--3	
	12,000	40GRQB12B--3	
	12,000	40GRQB12H--3	
	18,000	40GRQB18B--3	
	18,000	40GRQB18H--3	
High Wall 40GJ*B	9,000	40GJQB09B--3	
	12,000	40GJQB12B--3	
	18,000	40GJQB18B--3	
	24,000	40GJQB24B--3	
Ducted 40GJ*D	9,000	40GJQB09D--3	
	12,000	40GJQB12D--3	
	18,000	40GJQB18D--3	
	21,000	40GJQB21D--3	
	24,000	40GJQB24D--3	
Floor Console	9,000	40GJQB09F--3	
	12,000	40GJQB12F--3	
	18,000	40GJQB18F--3	
Cassette 40GJ*C	12,000	40GJQB12C--3	
	18,000	40GJQB18C--3	
	24,000	40GJQB24C--3	

2.3 Rated working condition

Table 2

	Indoor side state		Outdoor side state	
	Dry buib temp. °F	Wet buib temp. °F	Dry buib temp. °F	Wet buib temp. °F
Rating cooling	80.06	66.92	95	75.02
Rating Heating	69.98	60.08	49.99	43.00

NOTICE

1) The following listed cooling /heating capacity and noise is tested before shipping.
2) The parameters below are tested under a rated working condition. If there is any change to them, please refer to the nameplate.
3) The heating capacity parameters of the heat pump indoor unit excludes the auxiliary electric heating power.
4) The performance parameters below are tested according to the ANSI/AHRI 1230-2010 standard.

2.4 The range of production working temperature

Table 3

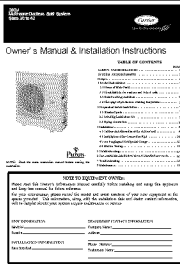

Cooling Working range	Outdoor temperature 0~118°F
Heating Working range	Outdoor temperature -4~86°F

3 Preparation before Installation

3.1 Standard parts

Please use the following standard parts included with the air conditioning units.

Table 4

Outdoor Unit Parts				
Number	Name	Picture	Quantity	Remark
1	Owner's manual		1	
2	Tube connector subassy		8	

3.2 Selecting the installation site

⚠ WARNING	
1)	Install the unit in a location that can withstand the weight of the unit and make sure the unit does not shake or fall off.
2)	Never expose the unit to direct sunshine and rainfall. Install the unit at a place free of dust, typhoons and earthquakes.
3)	Try to keep the unit away from combustible, inflammable and corrosive or exhaust gases.
4)	Leave some space for heat exchanging and servicing to guarantee the unit's normal operation.
5)	Keep the indoor and outdoor units close to each other to shorten the pipe length and minimize the number of pipe bends.
6)	Never allow children to approach the unit and prevent them from touching the unit.

Figure 3 details the outdoor unit's required installation space when the outdoor unit is completely surrounded by walls.

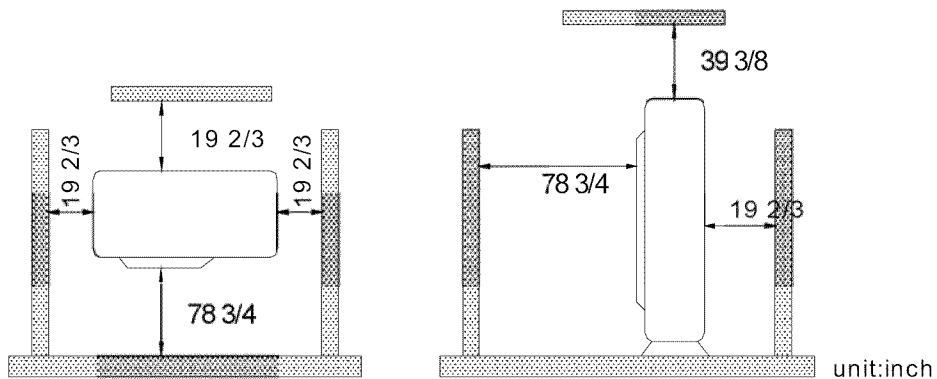


Fig 3

3.3 Piping Connection

The maximum pipe length is shown in the following table. When the distance between units (piping length) is out of the range listed below, normal operation of the unit can not be guaranteed.

Table 5

Model	Connecting Pipe (inch)		Max. Pipe length(ft)	Max. Height Difference between Indoor Unit and Outdoor Unit (ft)
	Liquid	Gas		
38GJQF30---3	Φ 1/4	Φ 3/8	229.6	When the outdoor unit is above, the maximum height difference between the indoor and outdoor units is up to 49.2ft. When the indoor unit is above, the maximum height difference between the indoor and outdoor units is up to 49.2ft.
38GJQG36---3	Φ 1/4	Φ 3/8	246.1	
38GJQG42---3	Φ 1/4	Φ 3/8	246.1	

NOTICE

1) Use water-proof insulating pipe.
2) Wall thickness of pipe: 0.019-0.039 inch; bearing pressure: 3.0MPa
3) The longer the connection pipe is, the more the cooling and heating capacity will decrease.

4 Installation

4.1 Outline and dimension of the outdoor unit

38GJQF30---3

Outline dimension and mounting holes

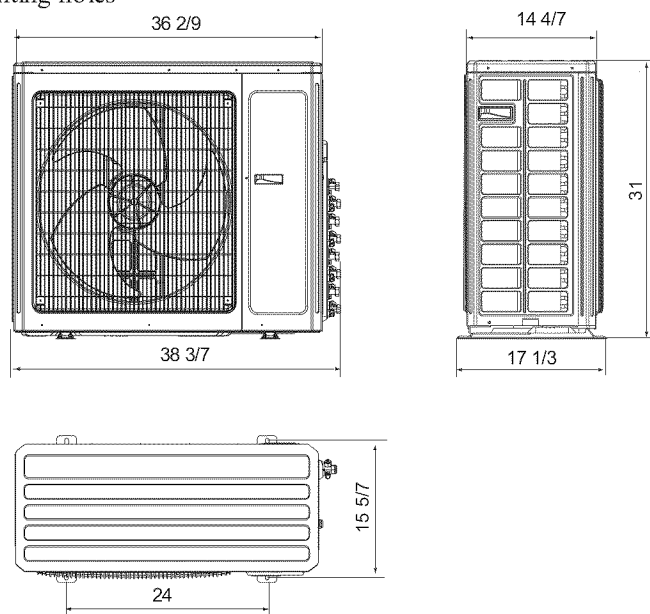


Fig 4

Unit:inch

38GJQG36---3, 38GJQG42---3

Outline dimension and mounting holes

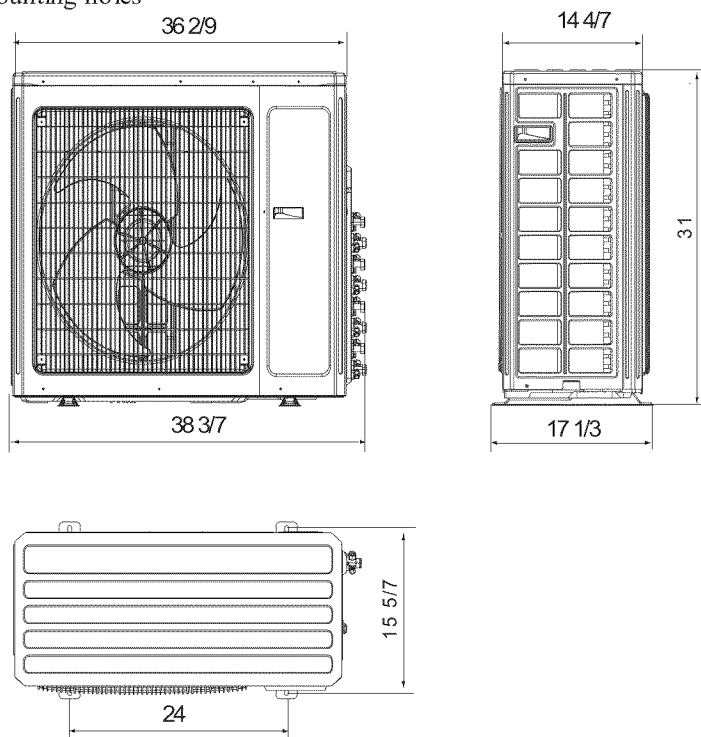


Fig 5

Unit:inch

4.2 Installation of the Connection Pipe

Connecting piping for the indoor unit and outdoor unit are in the manifold mode (see the figure below).

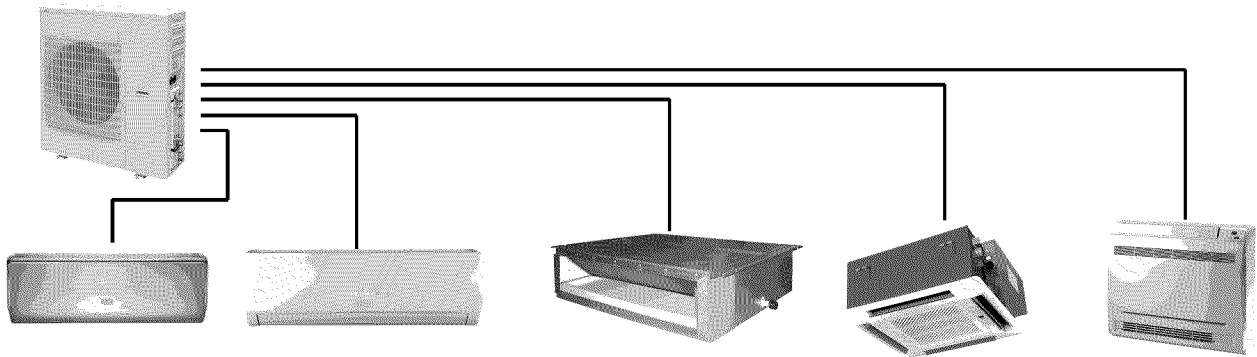
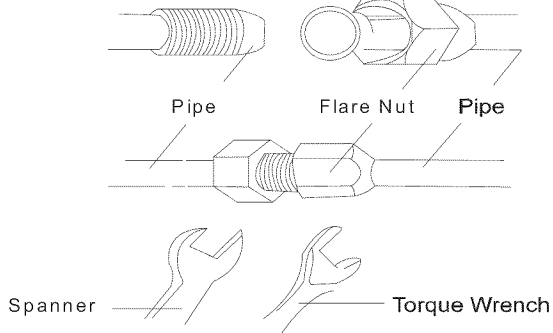


Fig 6

4.2.1 Piping between the Indoor and Outdoor Units

- (1) If the liquid and gas stop valves, which have the sign A , B, C, D or E , have not been connected to the indoor units, turn off the screw cap with the spanner airproof.
- (2) Refer to Fig.7 for the appropriate amount of torque to tighten the screws.
- (3) Point the flare end of the copper pipe at the screw and tighten the screw by hand.
- (4) Next, tighten the screw with the torque wrench until it emits a sound (as shown in Fig.7).
- (5) The bending degree of the pipe can not be too small; otherwise it will crack. Use a pipe tube bender to bend the pipe.
- (6) Wrap the exposed refrigerant pipe and the joints by sponge and then tighten them with the plastic tape.



Fid 7

Pipe diameter	Thickness of copper tube	Tightening torque
Φ1/4 inch	≥0.0315 inch	11~22 ft·lbf
Φ3/8 inch	≥0.0315 inch	26~29 ft·lbf
Φ1/2 inch	≥0.0315 inch	33~37 ft·lbf
Φ5/8 inch	≥0.0394 inch	44~48 ft·lbf

⚠ CAUTION	
1)	During the connection of the indoor unit and the refrigerant pipe, never pull the indoor unit joints forcefully, otherwise the capillary or other pipes may crack, which would result in leakage.
2)	The refrigerant pipe should be supported by brackets. Do not allow the unit to support the weight of the refrigerant pipe.
3)	If the piping connection size of the outdoor unit does not match the piping connection size of the indoor unit, use the piping connection dimension of the indoor unit. Use different-diameter joints which is installing on the place of the piping connection to connect the indoor unit.
4)	For the Free Match system, each pipe should be labeled to indicate which system it belongs to avoid mistaken inaccurate piping.

4.2.2 Allowable pipe length and drop height among indoor and outdoor units

If the total refrigerant pipe length (liquid pipe) is shorter than that listed in the table below, no additional refrigerant will be charged.

Table 6

Model	38GJQF30---3	38GJQG36---3	38GJQG42---3
Total Liquid Pipe Length (a+b+c+d+e)	131.2ft	131.2ft	131.2ft

Allowable Length and Height for the Refrigerant Pipe

Table 7

		Allowable Value		Fitting Pipe
		38GJQF30---3	38GJQG36---3 38GJQG42---3	
Total length (actual length) of fitting pipe		229.6ft	246.1ft	$L_1+L_2+\dots+L_M (M \leq 5)$
Length of farthest fitting pipe (ft)		82ft	82ft	$L_X (X=1, 2, 3, 4,5)$
Height difference between outdoor unit and indoor unit	Outdoor unit at upper	49.2ft	49.2ft	H1
	Outdoor unit at lower	49.2ft	49.2ft	H3
Height difference between indoor units (m)		24.6ft	24.6ft	H2

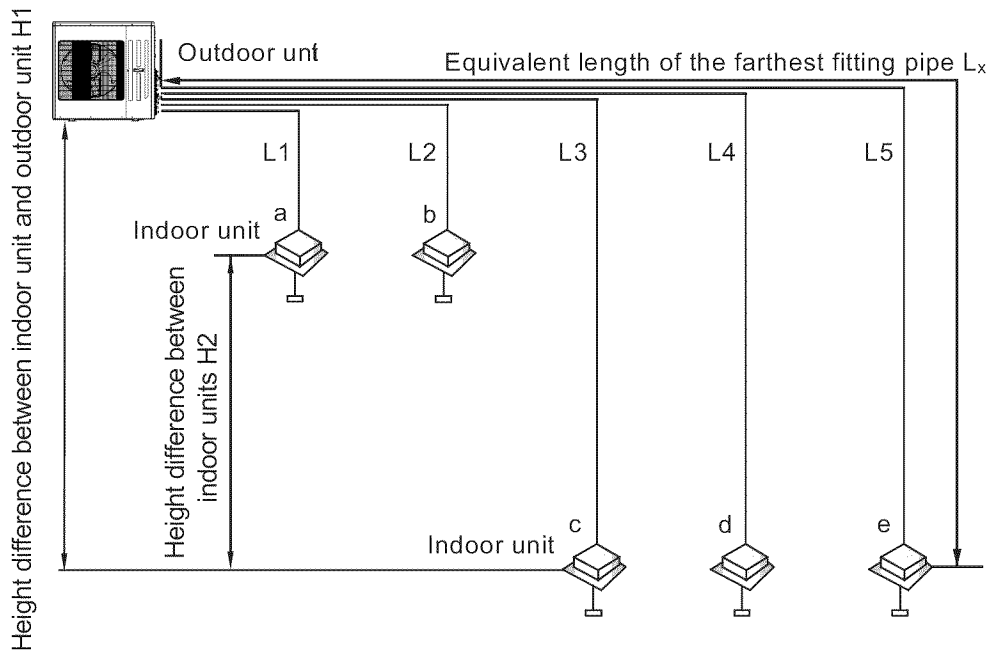


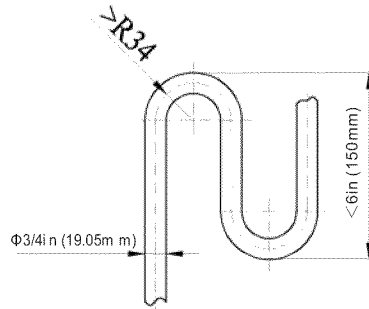
Fig 8

4.2.3 Oil Trap Design Requirements

If the height difference between the indoor unit and the outdoor unit exceeds 19.7ft (6m), install an oil trap every 19.7ft (6m) from the lower to the upper section of the vertical gas pipe. The oil trap shall be fabricated into two U-type elbows or one return-type elbow. The height shall be 3~5 times the piping diameter.

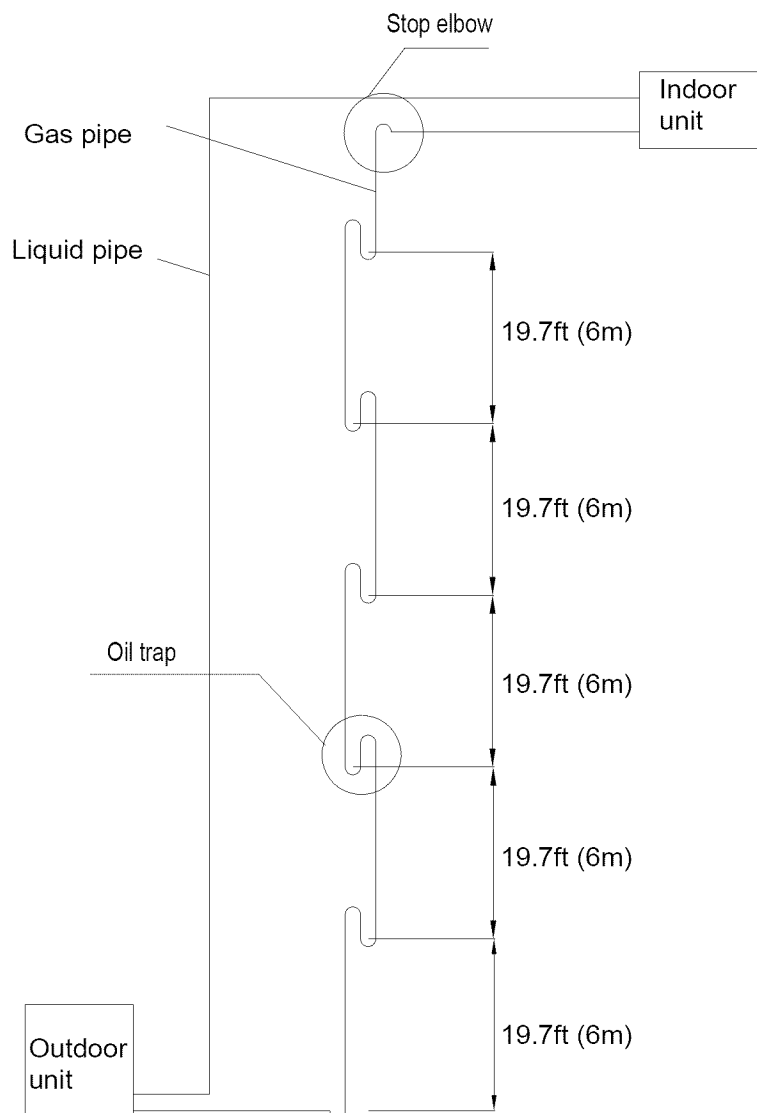
See below for details on the installation and fabrication of the oil trap.

- ①. The oil trap may be fabricated into a U-type or return-type.
- ②. If the outdoor unit is below the indoor unit, it is not needed to install an oil trap on the vertical pipe for gas piping.
- ③. If the outdoor unit is below the indoor unit, it is not needed to install an oil trap at the highest or lowest position. If the outdoor unit is above the indoor unit, the oil trap and stop elbow must be installed at the lowest and the highest position of the vertical pipe. Refer to the schematics below.
- ④. The fabrication dimensions of the oil trap are shown below.

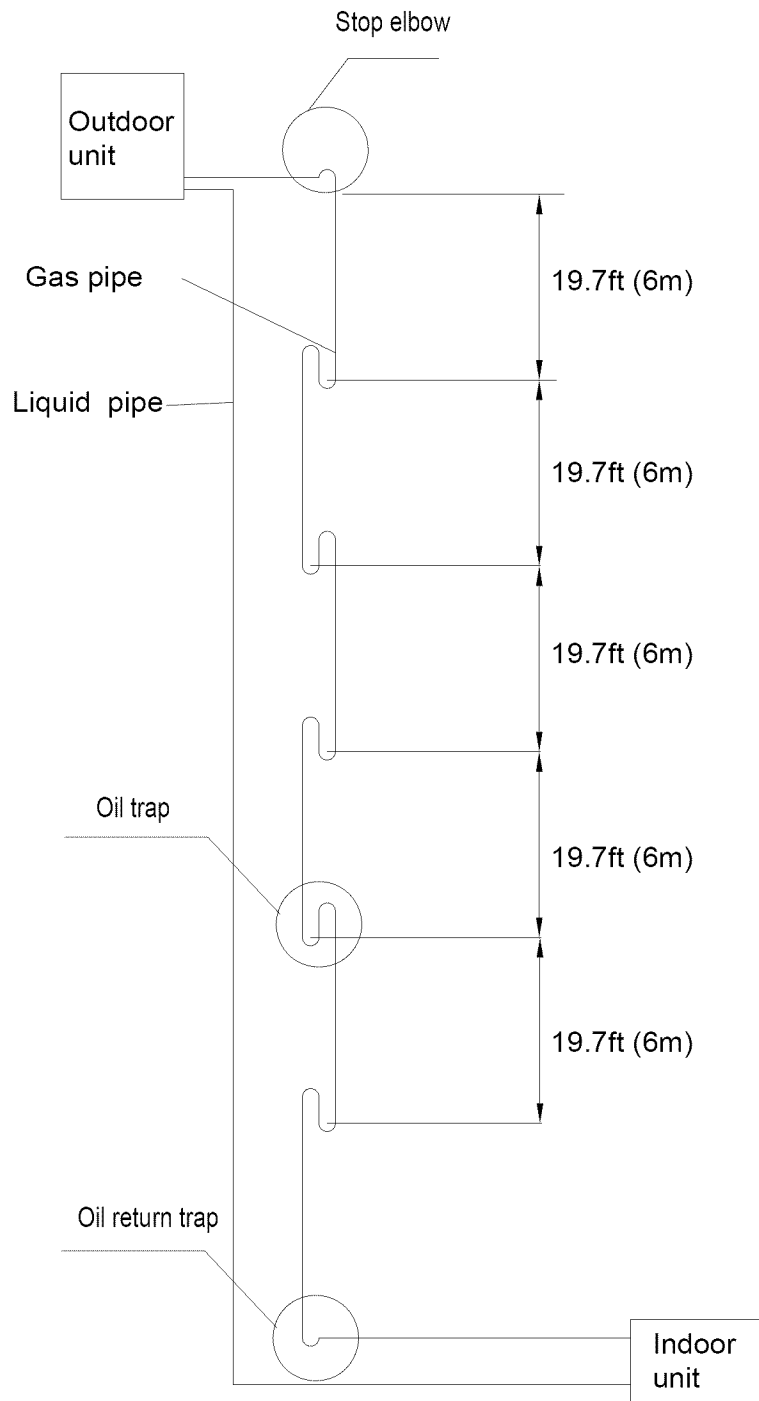


⑤. Refer to the schematics below.

- ◆ The outdoor unit is lower than the indoor unit.



- ◆ The outdoor unit is higher than the indoor unit.



4.2.4 Installation of the Refrigerant Pipe Protection Layer

The refrigerant pipe should be insulated by the insulating material and plastic tape to prevent condensation and water leakage.

The joints of the indoor unit should be wrapped with the insulating material. Ensure there is no gap on the joint of the indoor unit, as shown in Fig.9.

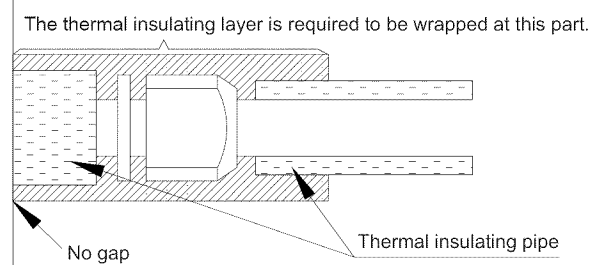


Fig 9

⚠ CAUTION

After the pipe is protected, do not bend it to form a small angle; otherwise it will crack or break.

(3) Wrap the Pipe with Tape:

- Bundle the refrigerant pipe and electric wire together with tape, and separate them from the drain pipe to prevent the condensate water from overflowing.
- Wrap the pipe from the bottom of the outdoor unit to the top of the pipe where it enters the wall. During the wrapping, the later circle should cover half of the former one.
- Fix the wrapped pipe on the wall with clamps.

⚠ CAUTION

- Do not wrap the pipe too tight; otherwise the insulation effect would be weakened. Ensure drain hose is separated from the pipe.
- Next, fill the hole on the wall with sealing material to prevent wind and rain from entering the room.

4.2.5 Support and protection for the pipeline

Support should be made for hanging the connection pipe. The distance between each support can not exceed 3.3 ft (1m).

4.3 Air Purging and Refrigerant Charge

4.3.1 Air purging

- The refrigerant in the outdoor unit was charged before shipment. Additional refrigerant needs to be charged into the refrigerant pipe during the field installation.
- Ensure the outdoor unit's liquid and gas valves are closed completely.
- As shown in the following figure (Fig. 10), expel the gas inside the indoor unit and the refrigerant pipe with the vacuum pump.

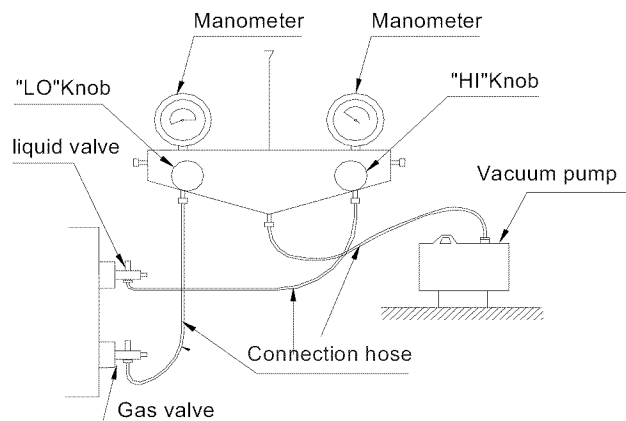


Fig 10

- When the compressor is not running, charge the R410A refrigerant into the refrigerant pipe from the liquid valve of the outdoor unit (do not charge from the gas valve).

4.3.2 Additional refrigerant charging

(1) Refrigerant Charge in the Outdoor Unit before Shipment

NOTICE

- The outdoor unit has been charged with refrigerant prior to delivery. The refrigerant charge is not included and is an additional charge for the indoor unit and the refrigerant pipe.
- The amount of the additional refrigerant charge depends on the diameter and length of the liquid refrigerant pipe which is determined by the actual yield installation requirement.
- Record the additional refrigerant charge for future maintenance.

(2) Calculation of the Additional Refrigerant Charge

Additional Refrigerant Charge=

$$(\Sigma \text{Length of Liquid Pipe } \phi 0.375 \times 54 + \Sigma \text{Length of Liquid Pipe } \phi 0.25 \times 22) - 880$$

The largest additional refrigerant charge value is 800g. This means if the calculated value exceeds 800g, the additional refrigerant charge takes 800g, while the calculated value takes less than 800g, the additional refrigerant charge takes the calculated value.

4.4 Electric Wiring

4.4.1 Wiring precautions

- (1) The installation must be done in accordance with the national wiring regulations.
- (2) Only a power cord with the rated voltage and exclusive circuit for the air conditioning can be used.
- (3) Do not pull the power cord forcefully.
- (4) The electric installation should be performed by a technician instructed in the local laws, regulations and this manual.

(5) The diameter of the power cord should be large enough for the unit. If the cord is damaged, it must be replaced by the dedicated one.

(6) The ground should be firm and the earth wire should be connected to the dedicated device of the building by the technician. The air switch coupled with the leakage current protection switch must be equipped and have enough capacity in both the magnetic and thermal tripping functions in case of the short circuit and overload.

Table 8

Models	Power Supply	Capacity of the air Switch (A)	Recommended Cord (pieces × sectional area)
38GJQF30---3	208/230V~60Hz	32	3 × 0.0062 sq in
38GJQG36---3	208/230V~60Hz	32	3 × 0.0062 sq in
38GJQG42---3	208/230V~60Hz	32	3 × 0.0062 sq in

38GJQF30---3

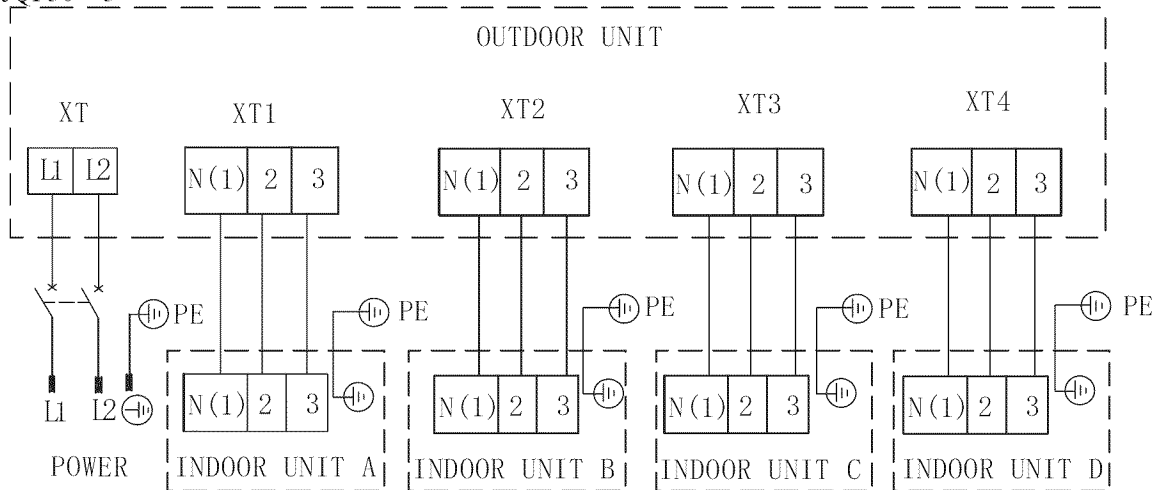


Fig 11

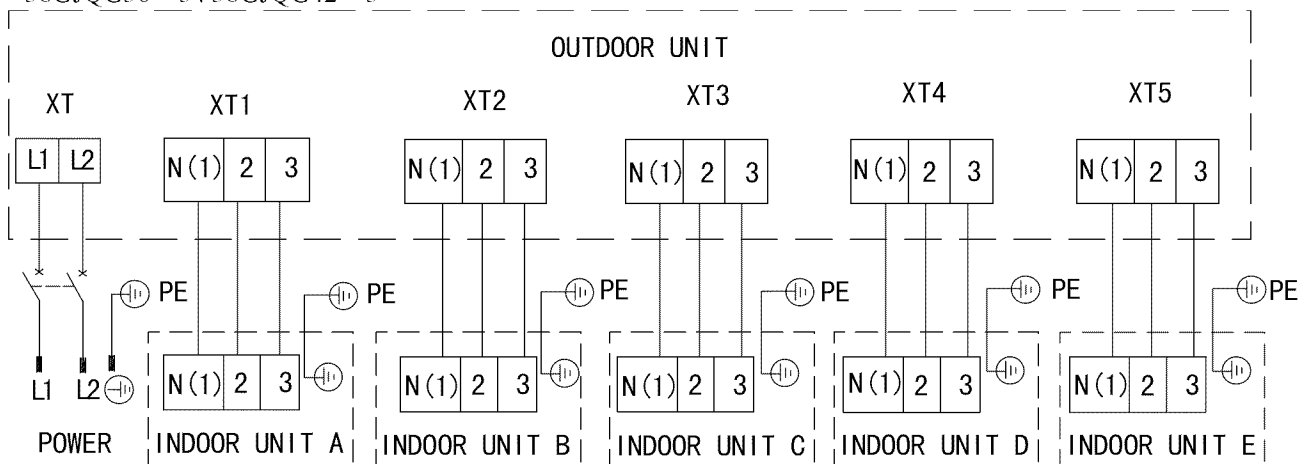


Fig 12

4.4.2 Grounding Requirements

(1) The air conditioner is classified as a Class I appliance, so its grounding must be reliable.

(2) The yellow-green line of the air conditioner is the earth line and can not be used for any other purpose, cut off or fixed by the tapping screw; otherwise it would cause an electric shock.

(3) A reliable ground terminal should be provided and the ground wire can not be connected to any of the following items:

①Running water pipe ②Coal gas pipe ③Sewage pipe ④Other places where the professional personnel think unreliable.

4.4.3 Electrical Cable Connection

⚠ CAUTION

- 1) A mistake connecting the line will result in a malfunction. After the electrical wiring is working, ensure the wire between the connection place and the fixed place has a certain amount of space.
- 2) The connection piping and connection line of each indoor unit should connect well according to the instruction.
- 3) The electric installation should be carried out by a technician instructed in the local laws, regulations and this manual.
- 4) The installation location should be dry, shielded from direct sunlight or strong winds.
- 5) Install a breaker in the circuit that can shut off the system's main power supply. Also install an air switch coupled with the leakage current protection switch must be equipped.

4.4.4 Wiring of the Power Cord

(1). Open the side plate.

(2). Connect the power cord to terminals “L1”, “L2” and the earthing bolt. Next, connect the wiring terminals “N(1),2,3” of the indoor unit to the corresponding outdoor unit terminals.

(3). Fix the power cord with wire clips.

(4). Place the power cord through the rubber ring.

⚠ CAUTION

If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.

5 Troubleshooting

⚠ WARNING

- 1) In the event of abnormal conditions (for example, a foul smell), shut off the main power supply immediately and contact your Service Center. Operating under abnormal conditions would damage the air conditioning unit and would cause electric shock or a fire hazard.
- 2) Do not attempt to repair the air conditioning. Contact a professionally skilled technician at the appointed service center. An incorrect repair would cause electric shock or a fire hazard.

Check before Contacting Service Center.

Table 9

Check Items	Conditions Might Happen	Check
Has the unit been secured firmly?	The unit may drop, shake or emit noise.	
Have you done the gas leakage test?	It may cause insufficient cooling/heating capacity.	
Does the unit have proper thermal insulation?	It may cause condensation and dripping.	
Does the unit drain well?	It may cause condensation and dripping.	
Is the voltage in accordance with the rated voltage specified on the nameplate?	It may cause a malfunction or damage the part.	
Is the electric wiring and piping connection installed correctly and securely?	It may cause malfunction or damage the part.	
Has the unit been earthed securely?	It may cause electrical leakage.	
Is the power cord specified?	It may cause malfunction or damage the part.	
Has the inlet and outlet been blocked?	It may cause insufficient cooling/heating capacity.	

NOTICE!

If the air conditioner still runs abnormally after the above checks, please contact a maintenance serviceman at the local appointed service center and provide a description of the error as well as the model of the unit.

6 The conditions listed below are not classified into errors.

Table 10

Conditions		Causes
The unit does not run	When restarted immediately after it was stopped.	The overload protection switch of the unit delays the startup for three minutes.
	As soon as power is on.	The unit remains in stand by mode for approximately one minute.
The unit blows out mist	When the cooling operation starts.	The hi-humidity indoor air is cooled quickly.
The unit generates noise	The unit “clatters” as soon as it starts running.	It is the sound generated during the initialization of the electronic expansion valve.
	The unit “swishes” during the cooling operation.	It is the sound of the refrigerant gas that runs inside the unit.
	The unit “swishes” when it starts or stops.	It is the sound of the refrigerant gas as it stops running.
	The unit “swishes” when it is on and after it runs.	It is the sound of the draining system operating.
	The unit “squeaks” when it is on and after it runs.	It is the sound of friction generated by the skin plate which swells due to the temperature change.
The unit blows out dust.	When the unit restarts after not running for a long time.	The dust inside the unit is blown out .
The unit emits odors.	When the unit is running.	The odors absorbed by the unit are blown out.

NOTICE!

If problem can not be solved after checking the above items, please contact service center and provide details and model(s).

The following conditions are not malfunctions.

malfunctions Table 11

Malfunction		Reason
Unit does not run	When the unit is started immediately after it is just turned off	Overload protection function provides a 3 minute delay
	When power is turned on	Standby function delays operation for about 1 minute
Mist comes from the unit	Under cooling	Indoor high humidity air is cooled rapidly
Noise is emitted	Slight cracking sound is heard when unit is turned on	It is the sound generated during the initialization of the electronic expansion valve.
	There is sound when cooling	The gas refrigerant is flowing in unit
	There is sound when the unit starts or stops	The gas refrigerant has stopped flowing
	There is a slight and repetitive sound when the unit is running or after running	This is the sound of the drainage system.
	A cracking sound is heard when the unit is operating and after operating	The sound is caused by expansion of the panel and other parts due to temperature change
The unit blows out dust	When the unit runs after not running for a long time.	Dust in the indoor unit is blown out
The unit emits odor	Operating	The room odor absorbed by the unit is blown out
Indoor unit still runs after turned off	After every indoor unit receive "stop" signal, fan keeps	Indoor fan motor keep running 20-70s to make good use of excess cooling and heating and to prepare for

	running	next operation
Mode conflict	COOL or HEAT mode can not be operated	When the indoor operating mode conflicts with that of outdoor unit, the indoor fault indicator flashes and the conflict appears on the wired controller after 5 minutes. The indoor unit stops. The outdoor operating mode switches to the mode of the indoor unit. Next, the unit returns to normal. The COOL mode does not conflict with the DRY mode. The FAN mode does not conflict with any mode.

7 Troubleshooting

The error code displays on the wired controller and the main board of the outdoor unit
Table 12 details the meaning of each error.

Table 12

Malfunction	The indicator display		
	Yellow light	Red light	Green light
Compressor runs	Flash once		
Defrost	Flash twice		
Anti-freezing protection	Flash 3 times		
IPM protection	Flash 4 times		
AC over-current protection	Flash 5 times		
Over-burden protection	Flash 6 times		
Compressor exhaust high temperature protection	Flash 7 times		
Compressor overload protection	Flash 8 times		
Power protection	Flash 9 times		
EEPROM reads and write protection	Flash 11 times		
Low PN voltage protection	Flash 12 times		
Over voltage protection for PN	Flash 13 times		
PFC protection	Flash 14 times		
PFC module temperature protection	Flash 15 times		
Low pressure protection	Flash 17 times		
High pressure protection	Flash 18 times		
Limit/decline frequency(electric current)		Flash 1 times	
Frequency limit (exhaust)		Flash 2 times	
Frequency limit (Over-burden)		Flash 3 times	
Outdoor ambient sensor malfunction		Flash 6 times	
Outdoor tube sensor malfunction		Flash 5 times	
Exhaust sensor malfunction		Flash 7 times	
Attain the temperature of switch on		Flash 8 times	
Frequency limit(power)		Flash 13 times	
Outdoor fan malfunction		Flash 14 times	
Frequency limit(PFC module temperature)		Flash 15 times	
PFC module sensor malfunction		Flash 16 times	
Liquid pipe temperature sensor malfunction of A		Flash 17 times	
Gas pipe temperature sensor malfunction of A		Flash 18 times	
Liquid pipe temperature sensor malfunction of B		Flash 19 times	
Gas pipe temperature sensor malfunction of B		Flash 20 times	
Liquid pipe temperature sensor malfunction of C		Flash 21 times	
Gas pipe temperature sensor malfunction of C		Flash 22 times	
Liquid pipe temperature sensor malfunction of D		Flash 23 times	
Gas pipe temperature sensor malfunction of D		Flash 24 times	
Liquid pipe temperature sensor malfunction of E		Flash 25 times	
Gas pipe temperature sensor malfunction of E		Flash 26 times	
Exit of the condenser tube sensor malfunction		Flash 27 times	
Correspondence is normal			Flash n times (n=indoor unit number)
Communication failure between indoor unit and outdoor unit			Often bright (indoor unit all Communication failure)

8 Maintenance

A regular inspection, maintenance and care should be performed by professional personnel, which will prolong the unit's life span.

8.1 Outdoor heat exchanger

The outdoor heat exchanger should be cleaned once every two months. Use a vacuum cleaner with a nylon brush to clean up dust and small particles on the surface of the heat exchanger. Blow away dust with compressed air, if available. Never use water to wash the heat exchanger.

8.2 Drain Pipe

Regularly check if the drain pipe is clogged to drain condensate smoothly.

8.3 Notice before Seasonal Use

- (1) Check if the inlet/outlet of the indoor/outdoor unit is clogged.
- (2) Check if the ground wire is earthed reliably.
- (3) Check if the battery of remote wireless controller has been replaced.
- (4) Check if the filter screen has been set correctly.
- (5) After a long period of nonuse, open the main power switch 8 hours before re-operating the unit to preheat the compressor crankcase.
- (6) Check if the outdoor unit is installed securely. If there is anything abnormal, contact the appointed service center.

8.4 Maintenance after Seasonal Use

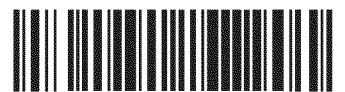
- (1) Cut off the main power supply to the unit.
- (2) Clean the filter screen and the indoor and outdoor units.
- (3) Clean the dust and small particles on the indoor and outdoor units.
- (4) In the event of rusting, use anti-rust paint to stop the spreading of rust.

8.5 Parts Replacement

Purchase parts from an appointed service center or dealer if necessary.

NOTICE!

During the airtight and leakage test, never mix oxygen, ethyne and other dangerous gas into the refrigeration circuit. In case of hazard, it is better to use nitrogen or refrigerant to perform the test.



66129917007

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>