

# INSTALLATION INSTRUCTION SHEET FOR AIR CONDITIONER LS/LT3507V ( Split wall-mounted type)

- For correct installation, read this manual before starting installation. Please save this manual in a safe place. We recommend that this air conditioner be installed properly by qualified technicians in accordance with the installation instructions provided with the unit.
- The system MUST be installed in accordance with the current Australia and New Zealand Refrigerant Handling Code of Practice.
- All charging must be carried out in accordance with AS/NZS 1677.2:1998 section 6.1: Charging and discharging refrigerant.
- Pictures in this manual may vary slightly.

## INSTALLATION PRECAUTION

Installation in the following places may cause trouble. If it is unavoidable, please, consult with the local dealer.

- A place full of machine oil.
- A saline place such as coast.
- A place full of sulfide gas such as hot-spring resort.
- Places where there are high frequency machines such as wireless equipment, welding machine, and medical facility.
- A place there is no combustive gases and volatile matter.
- A place of special environmental conditions.

### Indoor Unit

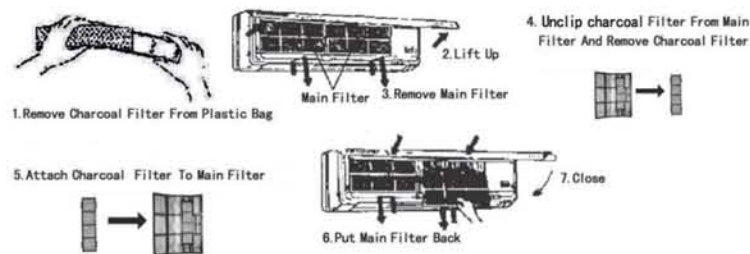
- A place where is no obstacle near the inlet and outlet area.
- A place which can bear the weight of the indoor unit.
- A place which is convenient to maintenance.
- A place which provides the space around the indoor unit as required right in the diagram.
- A place 1m or more to TV, radio instrument, in the center of the room is perfect.
- A place which is far from heat, steam and inflammable gas.
- The indoor unit should be installed on the wall at a height of 2.3 metres or more from the floor.

### Outdoor Unit

- A place, which is convenient to installation and not exposed to a strong wind. A place that is dry and ventilated.
- A place can bear the weight of the outdoor unit and where the outdoor unit can be held in the horizontal position.
- A place which does not allow an increase in noise level and vibration.
- A place where the operation noise and discharge air do not disturb your neighbor or animals.
- A place free of a leakage of combustive gases.
- An allowable head level at the connective piping is less than 5m and length of the connective piping is up less than 10m.
- No any obstacle which block radiate air. Unavailable to children.
- A place, which provides the space around the outdoor unit as required right in the diagram.

## Replacement of air purifying charcoal filter

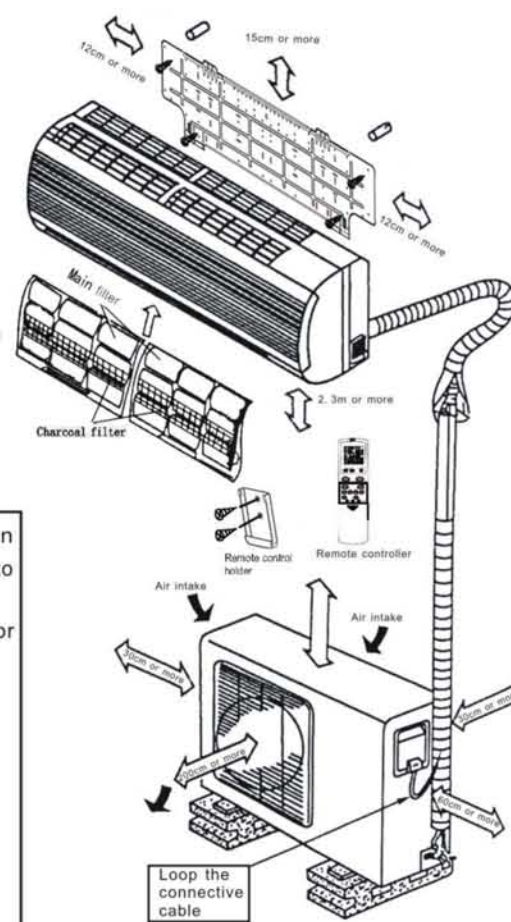
The charcoal filters cannot be washed in water or any other cleanser, depending how dirty the air is, the filter may have to be replaced with new one every 3-6 months. Please discard the used filter. New replacement charcoal filters can be purchased from service agents. To change the filter follow the following instruction:



## Accessories

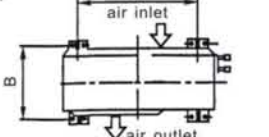
Please install the accessories attached with unit correctly according to this installation manual.

- Note:
1. At least two of A, B, C aspects are free from blocking.
  2. When the Outdoor Unit is higher than the Indoor Units, to prevent the rain from flowing into the indoor along the connection pipe, a downward tipping arc should be made before the connection pipe entering the wall to indoor to ensure the lowest point on the connection pipe is at outdoor.
  3. The illustration above is only a sketch. Different models would be slightly different.



### Anchor bolts of outdoor unit installation

The outdoor unit should not be exposed to strong wind. Fix the outdoor unit with  $\phi 10$  or  $\phi 8$  anchor bolts.

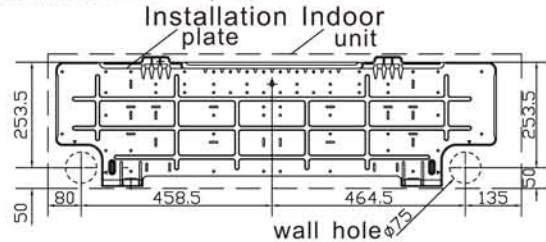


	A (mm)	B (mm)
LT3507V	633	340

## INDOOR UNIT INSTALLATION

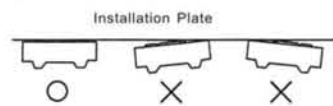
### 1. Drilling A Hole and Mounting Installation Plate

Installation Plate and Its Dimension (mm)



#### 1. Fix the installation plate.

1. Install the installation plate horizontally on structural parts in the wall with the spaces provided around the plate.
2. In case of brick, concrete or similar type walls, make 5mm dia holes in the wall. Insert clip anchors for appropriate mounting screws.
3. Fix the installation plate on the wall.



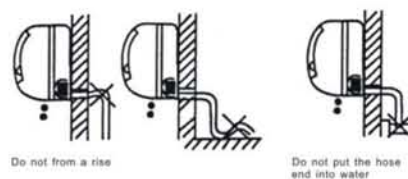
#### 2. Drilling a hole

1. As diagram above determine the pipe hole position using the installation plate, drill the pipe hole ( $\phi 65$ mm), the outside pipe hole is 5-10mm lower than the inside one, so it slants slightly downward.

### 2. Connective Pipe and Drainage Installation

#### 1. Drainage

1. Run the drain hose sloping downward. Do not install the drain hose as illustrated below.



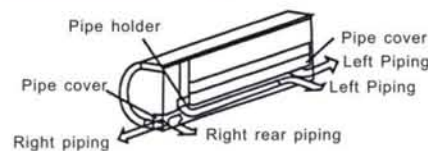
2. When connection extension drain hose, insulate the connecting part of extension drain hose with a shield pipe

#### 3. Piping and bandaging

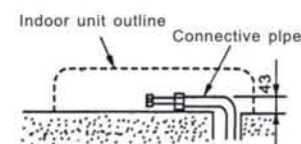
Wind the connective cable, drain hose and wiring with tape securely, evenly as shown below.

- Because the condensed water from rare of the indoor unit is gathered in ponding box and is piped out of room. Do not put anything else in the box.

#### 2. Connective pipe



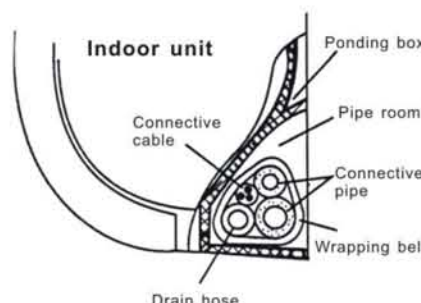
1. For the left-hand or right-hand piping, remove the pipe cover from the side panel.
2. For the left rear or right rear piping, install the piping as shown. Bend the connective pipe to be laid at 43mm height or Less from the wall.



3. Fix the end of the connective pipe. (Refer to Tightening Connection in REFRIGRANT PIPING CONNECTION)

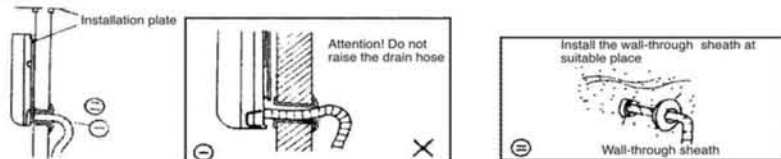
#### CAUTION

- Connect the indoor unit first then the outdoor unit and bend and arrange the pipe carefully.
- Do not allow the piping to let out from the back of the indoor unit.
- Be careful not to let the drain hose slack.
- Insulate both of the auxiliary piping.
- Banding the drain hose under the auxiliary pipe.
- Do not allow the power cable and control cable be crossed.



### 3. Installation of Indoor unit

Pass the pipes through the wall, hoist the unit on the installation plate, fix the lower part with a hook.



### Packing List

Order	Name	Quantity	Remarks
1	Indoor unit (Include charcoal filter and purifying filter)	1	In the indoor unit packing box
2	Remote Controller	1	
3	Wall-mounted Plate	1	
4	User's Manual	1	
5	Batteries(AAA SIZE 1.5V)	2	
6	Remote Control holder	1	
7	Wall-through Sheath	2	
8	Binding Belt	1	
9	Fix Screw ST4*30	9	
10	Wall-hole Block Putty	1	
11	Insulated Tape	1	In the outdoor unit packing box
12	Dust Proof Film	1	
13	Certificate of Quality	1	
14	Outdoor Unit	1	
15	Catchment Trough	1	
16	The rubber leg of the outdoor unit	4	

# INDOOR UNIT INSTALLATION

## 4. Wiring

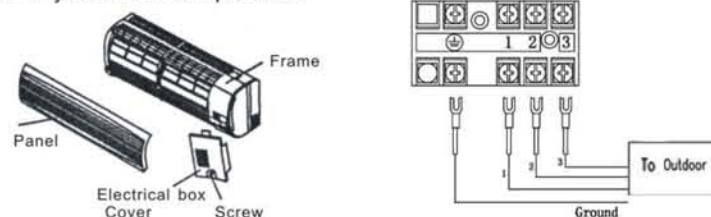
To Comply with the requirements of the Australian Standards AS3000 S.A.A. Wiring Rules, the electrical wiring required between the indoor and outdoor units must be installed by a licenced electrical contractor.

All equipment must be installed with compliance with your local Electricity Authority Electrical Regulations.

To determine the correct cable size and circuit breaker, please refer to the electrical information shown on the attached rating plate.

## 5. Connecting Cables

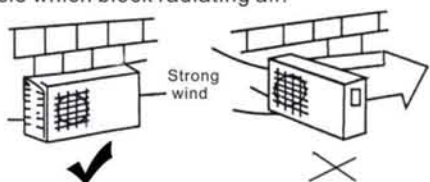
1. Indoor/Outdoor connection cable should be H07RN-F type.
2. Remove the panel and Screw, then remove the electrical box cover.
3. Connect cables according to their marks to terminals.
4. Wrap those cables not connected with terminals with insulation tapes, so that they will not touch any electrical components.



# ② OUTDOOR UNIT INSTALLATION

## 1. OUTDOOR INSTALLATION PRECAUTION

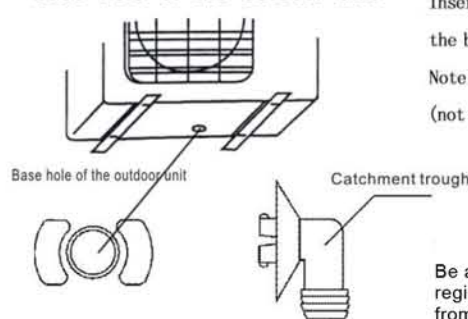
Install the outdoor unit on a rigid base to prevent increasing noise level and vibration. Determine the air outlet direction where the discharged air is not blocked. In the case that the installation place is exposed to strong wind such as a seaside operation by putting the unit lengthwise along the wall or using a dust or shield plates. Specially in windy area, install the unit to prevent the admission of wind. If need suspending installation, the installation bracket should accord with technique requirement in the installation bracket diagram. The connection between bracket and wall, bracket and the air conditioner should be firm, stable and reliable. Be sure there is no obstacle which block radiating air.



## 2. DRAIN ELBOW INSTALLATION

base hole of the outdoor unit

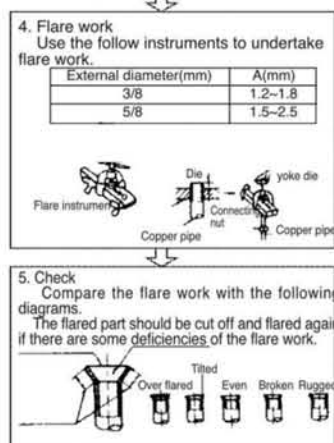
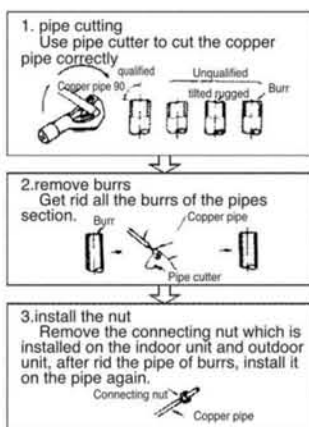
Insert the catchment trough into the hole of the base, connect an extended pipe to the trough.  
Note: The drained water should not affect neighbours. (not available for the cooling type)



Be aware, if you fit the drain elbow (Socket) in cold regions. The drain may freeze preventing the water from flowing from the unit.

## 3. REFRIGERANT PIPING CONNECTION

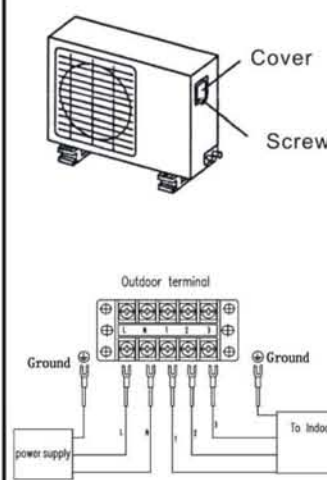
One of the major reasons causes gas leakage is the result of defective flare work, so please check the quality of the flare work according to the follow procedures.



- ① Connection of indoor unit
- Connect the thick and thin pipes to the indoor unit.
  - Apply a thin coat of refrigerating oil at the pipes joint.
  - When connecting, first aim at the centre, then screw the first 3-4 turns of the connecting nut by hand.
  - Take the wiring torque diagram as the standard of indoor pipe's connection.
- use two spanners to tighten them, over-tighten will damage the flared part.
- ② Connection of outdoor unit
- Take the same way as that of the indoor unit, connect the pipe with the stop valve pipe of outdoor unit.
  - Use a spanner to grip the valve and use the torque spanner to grip the connecting nut.
  - Connect the pipe to outdoor unit with the same wiring torque as that of indoor unit connecting.

External diameter(mm)	Wiring torque(kgf · cm)
3/8"	380-450
5/8"	500-575

## 4. WIRING CONNECTION



1. Remove the electric parts cover from the outdoor unit by loosening the screws.
2. Connect the connective cables to the terminals as identified with their respective matched numbers on the terminal block of indoor and outdoor units. Connect the ground wire to the ground screw, the washer under the screw must touch the electric installation plate.
3. To prevent the ingress of water, form a loop of the connective cable as illustrated in the installation diagram of indoor and outdoor units.
4. Insulate unused cords (conductors) with PVC-tape. Process them so they do not touch any electrical or metal parts.

### CAUTION

Wrong wiring connections may cause some electrical parts to malfunction.

# ③ AIR PURGE AND TEST OPERATION

## 1 Pipe-cleaning and Air Exhausting

Refrigerant regulation... if the length of the pipe is more than 5m, please refill the refrigerant (R410A)

Pipe length	less than 5m	more than 5m
	need not to refill refrigerant	see below table

	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m
LS/LT3507V	0	50	100	150	200	250	300	350	400	450	500

Make sure all the pipe joints have been screwed tightly according to the torque table, then engage in the pipecleaning and air exhausting operation.

1. Remove the valve core copper caps of the high pressure valve and the low pressure valve.
2. Loosen copper sealing cap of the low pressure (thick pipe) valve half turn (anti-clockwise).
3. Loosen the valve core of the high-pressure valve (thin pipe) one turn (anti-clockwise), the gas will leak from the sealing cap mouth of the thick pipe, tighten the copper sealing cap and valve core after 5 seconds or so, the pipe cleaning and air exhausting operation are finished.
4. Use the leakage detector or soapy water to check the system pipe joint and valve cap for leakage.
5. If there is no leakage, open the valve cores of the high pressure valve and the low pressure valve (anti-clockwise) completely, cover the copper caps of valve cores (They must be screwed tightly).

## 2 Test Run Procedure

Before test run operation, please check all the connecting wires and pipes carefully to see if they are correctly connected and firm, the stop valve has been completely opened or not, and if the air conditioner has been connected to earth reliably.

1. Connect the air conditioner system to the power source, a "Du" sound emitted by the indoor buzzer should be heard.
2. Turn on the air conditioner with the remote controller.
  - Please choose the "heating" mode and set temperature at 25°C to check its heating function.
  - Please choose the "cooling" mode, set temperature at 16°C to check its cooling function.

## 3 Instructions to Consumers

Explain the operation methods, the keys functions, the things should be paid attention to and so on to the consumers according to the instruction manual.

- Introduce the removing and installing methods of the filter nets and the method of air directioncontrolling.
- The fitting and removing methods of the remote controller batteries.
- Advise the consumers to read the users manual carefully before operation, and answer the consumers' questions politely.

### Note:

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