

## Package Air-conditioner Free Plan System Optional Parts 2-branch joint (CMY-Y62-G-E)

### Always observe for safety

- Carefully read this section 「Always observe for safety」, and securely install the optional parts.
- Be sure to observe the cautions described here: They include critical contents for safety.
- The following indications show the classifications for danger, and possible consequences following incorrect handling.

<b>WARNING</b>	Incorrect handling could lead to death or serious injury.
<b>CAUTION</b>	Incorrect handling could lead to injury or damage to house and household articles.

- After installation, perform a test run and make sure that there is no abnormality, and ask your customer to keep this installation sheet with the instruction manual at all times. Also ask the customer to transfer these manuals to a new user if the user changes.

### WARNING

Ask the dealer or specialist for installation.

Carefully install the panel according to this installation sheet.

- If installed incorrectly by user, water leak, electric shock, fire, etc. could result.

- Incorrect installation could cause water leak, electric shock, fire, etc.

Before performing installation (moving) and electrical work

### CAUTION

Do not place polyethylene bags in reach of young children.

If electrical work is necessary, use only specified electric wires adapted with current capacity.

- Putting them over the head will block breathing passages, which could result in suffocation.

- Use of unsuitable wire could cause electric leak, overheating or fire.


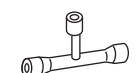
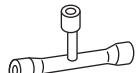
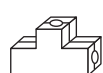
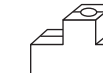
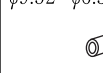

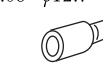


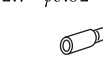
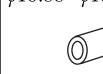
Securely apply heat-insulation to refrigerant pipe so that no condensation occurs.

Securely perform drain piping work according to the installation manual so that no condensation occurs.

- If heat-insulation is inadequate, condensation could occur on the surface of pipes and dewdrops could accumulate on ceiling, floor or important goods.

- If piping work is incorrect, water leak may occur and ceiling, furniture, etc may get wet.

### 1 Make sure that all the following parts are in packing box before performing work:

(1) This instruction sheet 	(2) 2-branch joint (thin)  × 1 for liquid pipe	(3) 2-branch joint (thick)  × 1 for gas pipe	(4) Pipe cover  × 1	(5) Pipe cover  × 1	(6) Pipe  φ9.52-φ6.35 × 2 for liquid pipe
(7) Pipe  φ15.88-φ12.7 × 1 for gas pipe	(8) Pipe  φ19.05-φ12.7 × 1 for gas pipe	(9) Pipe  φ19.05-φ15.88 × 2 for gas pipe	(10) Pipe  φ19.05-φ22.2 × 1 for gas pipe	(11) Pipe  φ12.7-φ9.52 × 2 for liquid pipe	(12) Pipe  φ15.88-φ19.05 × 1 for gas pipe

Note: Procure the following at local site:

- (1) Tape for sealing heat insulator and (2) Extension tube for refrigerant circuit.

### 2 Take care with the following when performing work:

1. Observe the restrictions in refrigerant tube length and number of installation indoor units that are described in outdoor unit installation manual.
2. Use anti-oxidization brazing to connect the 2-branch joint and tubes or pipes (6-12).
3. The 2-branch joint has stoppers: Insert the pipe to be connected all the way in until it stops.
4. There is no restriction on installation posture of 2-branch joint.
5. Take care that no foreign object, such as dust, enters the tubes during piping connection work.
6. Use heat insulator for all refrigerant tubes.

### 3 Selecting refrigerant tube size and using 2-branch joint

1. Procure tubes to be connected at local site.
2. Determine the sizes of tubes at each portion according to Tables 1-3.
3. The 2-branch joint is designed so that all tubes with sizes selected in step 2 can be connected.

Perform connections referring to Fig. 1 and Tables 4-9.

Connect each pipe to match the size, appropriately judging the following:  
Use without any processing, or Use while connecting pipe.

**Table 1** Size of tube connected to outdoor unit

Capability of outdoor unit	(1) When using R410A refrigerant		(2) When using R22/R407C refrigerant	
	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
Models -140	φ 9.52	φ 15.88	Model 71	φ 9.52 φ 15.88
			Models 100-140	φ 9.52 φ 19.05

**Table 2** Size of tube at branch

Total capacity of downstream indoor units	(1) When using R410A refrigerant		(2) When using R22/R407C refrigerant	
	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
All Models	φ 9.52	φ 15.88	Models -80	φ 9.52 φ 15.88
			Models 81-	φ 9.52 φ 19.05

**Table 3** Size of tube connected to indoor unit

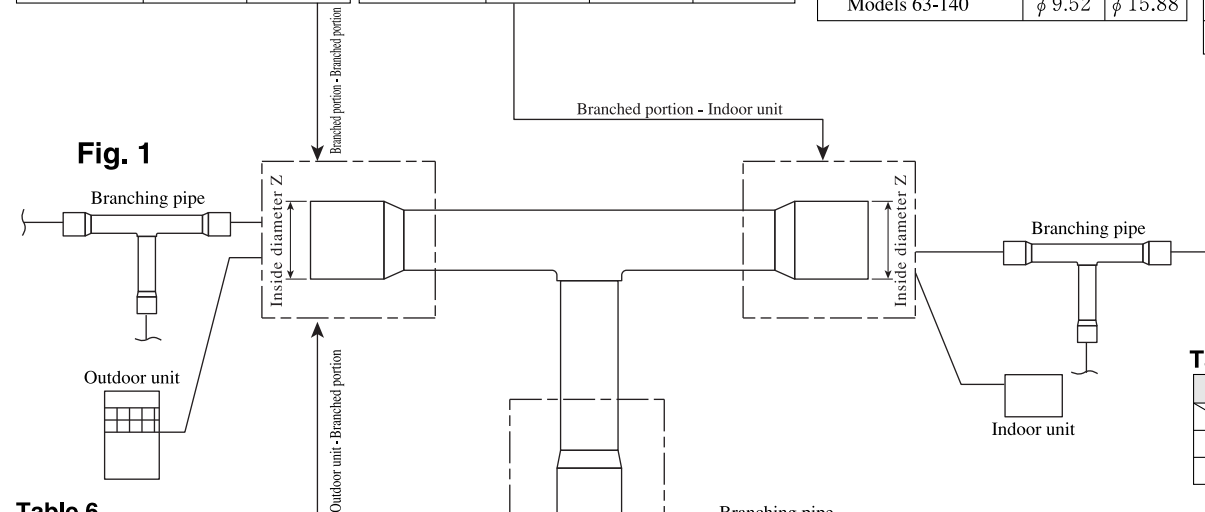
Capacity of indoor unit	(1) When using R410A refrigerant		(2) When using R22/R407C refrigerant	
	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
Models 20-50	φ 6.35	φ 12.7	Models 20-40	φ 6.35 φ 12.7
Models 63-140	φ 9.52	φ 15.88	Models 50-80	φ 9.52 φ 15.88
			Models 100-140	φ 9.52 φ 19.05

**Table 4**

Pipe dia. of outdoor unit (liquid/gas)	φ9.52/φ15.88	φ9.52/φ19.05
Liquid pipe (thin) [(2)]	Z dimension	Z dimension
Gas pipe (thick) [(3)]	Connect pipe (9)	Z dimension

**Table 5**

Pipe dia. of indoor unit (liquid/gas)	φ6.35/φ12.7	φ9.52/φ15.88	φ9.52/φ19.05
Liquid pipe (thin) [(2)]	Connect pipe (6)	Z dimension	Z dimension
Gas pipe (thick) [(3)]	Connect pipe (8)	Connect pipe (9)	Z dimension



**Table 6**

Pipe dia. of outdoor unit (liquid/gas)	φ9.52/φ15.88	φ9.52/φ19.05
Liquid pipe (thin) [(2)]	Z dimension	Z dimension
Gas pipe (thick) [(3)]	Connect pipe (9)	Z dimension

**Table 7**

Pipe dia. of indoor unit (liquid/gas)	φ6.35/φ12.7	φ9.52/φ15.88	φ9.52/φ19.05
Liquid pipe (thin) [(2)]	Connect pipe (6)	Y dimension	Y dimension
Gas pipe (thick) [(3)]	Connect pipe (7)	Y dimension	Connect pipe (12)

**Table 8**

Pipe dia. of outdoor unit (liquid/gas)	φ9.52/φ15.88	φ9.52/φ19.05
Liquid pipe (thin) [(2)]	Y dimension	Y dimension
Gas pipe (thick) [(3)]	Y dimension	Connect pipe (12)

**Table 9**

Pipe dia.	Liquid pipe		Gas pipe	
	Z	φ9.52	φ19.05	φ9.52
Y	φ9.52	φ15.88		

### 4 Attaching pipe cover (heat insulator)

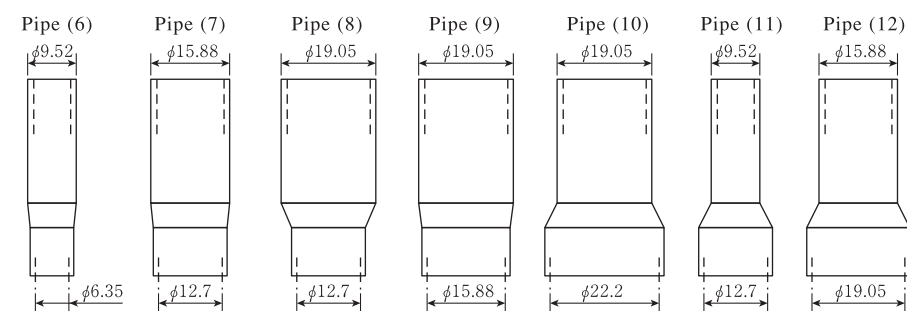
- Fit pipe cover (4) to liquid pipe (thin) (2) to attach it. Use heat insulator sealing tape (procured at local site) to seal the butted portion of pipe cover (4) (see Fig. 2).

- Process gas pipe (thick) (3) in the same way as liquid pipe (thin) (2).

Note 1: Use heat insulator for all refrigerant tubes (procured at local site).

When using generally available heat insulator, buy heat-resistant heat insulator (thickness of at least 12 mm).

Note 2: The pipe cover will slightly shrink at high temperatures: Use heat insulator with a lap margin.



**Fig. 2 (liquid pipe)**

