MITSUBISHI CITY MULT OPTIONAL PARTS

HEADER FOR 4 BRANCHING (CMY-Y104C-G) HEADER FOR 8 BRANCHING (CMY-Y108C-G) HEADER FOR 10 BRANCHING (CMY-Y1010C-G)

INSTALLATION MANUAL



Caution

The incorrect selection of the type of branch pipe and the size of connecting pipe does not allow the air conditioner to provide the rated capacity.

Please read this instruction manual carefully for correct mounting work.

1 The following parts are contained in this box. Please identify the quantity with types.

Header for 4 branching (CMY-Y104C-G)

1 Instruction	② Header	3 Header	④ Pipe cover - 1	⑤ Pipe cover - 2	6 Band
	For liquid line	For gas line			
This sheet 1 sheet	1 pc.	1 pc.	2 pcs.	2 pcs.	4 pcs.

Usable for 3/4 branching (* For 2 branching, use the optional header

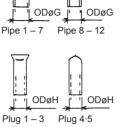
Sealing material

(1) Tape for sealing of insulation material

for 2 branching.)

Usable for 5/6/7/8 branching

Usable for 9/10 branching



Note: When the number of connecting pipes is less than the number of header branches, insert a plug of the appropriate size into each branch that does not have piping connected to it.

Table-1 Accessory pipes (Unit:mm[in])								
	Pipe Connection	n Specification		Quantity				
	F (Connecting	G (Outer	CMY-	CMY-	CMY-			
	Pipe Size)	Diameter)	Y104C-G	Y108C-G	Y1010C-G			
Pipe 1	ø9.52[3/8]	ø12.7[1/2]	1	1	1			
Pipe 2	ø15.88[5/8]	ø19.05[3/4]	1	1	2			
Pipe 3	ø12.7[1/2]	ø19.05[3/4]	_	1	2			
Pipe 4	ø6.35[1/4]	ø9.52[3/8]	3	6	5			
Pipe 5	ø12.7[1/2]	ø15.88[5/8]	3	5	6			
Pipe 6	ø19.05[3/4]	ø25.4[1]	_	1	1			
Pipe 7	ø22.2[7/8]	ø25.4[1]	_	1	1			
Pipe 8	ø28.58[1-1/8]	ø25.4[1]	_	1	1			
Pipe 9	ø15.88[5/8]	ø12.7[1/2]	-	-	3			
Pipe 10	ø9.52[3/8]	ø6.35[1/4]	_	_	5			
Pipe 11	ø19.05[3/4]	ø15.88[5/8]	_	2	1			
Pipe 12	ø22.2[7/8]	ø19.05[3/4]	_	1	1			

Table-2	Fable-2 Accessory plugs (Unit:mm[in])								
$\overline{}$	Pipe Connection Specification	Quantity							
	H (Connecting Pipe Size)	CMY- Y104C-G	CMY- Y108C-G	CMY- Y1010C-G					
Plug 1	ø6.35[1/4]	1	2	2					
Plug 2	ø9.52[3/8]	1	2	2					
Plug 3	ø12.7[1/2]	1	2	2					
Plug 4	ø15.88[5/8]	1	2	2					
Plug 5	ø19.05[3/ <u>4</u>]		1	1					

Header for 8 branching (CMY-Y108C-G) ② Header

For liquid line

This sheet I sheet	i pc.	I pc.	Each 2 pcs.	4 pcs.	6 pcs.	Each i pc.
Header for 10	0 branching (CMY-Y1010C	G-G)			
1 Instruction	② Header	③ Header	④ Pipe cover - 1	⑤ Pipe cover - 2	⑥ Band	Sealing material
	For liquid line	For gas line	THE STATE OF THE S			
This sheet 1 sheet	1 pc.	1 pc.	Each 2 pcs.	4 pcs.	6 pcs.	Each 1 pc.

4 Pipe cover - 1

⑤ Pipe cover - 2

Note 1) Please prepare the following materials in addition to the items above.

(2) Extension pipe for refrigerant circuit.

Select the correct size pipe referring to the installation manual of outdoor unit or the Databook.

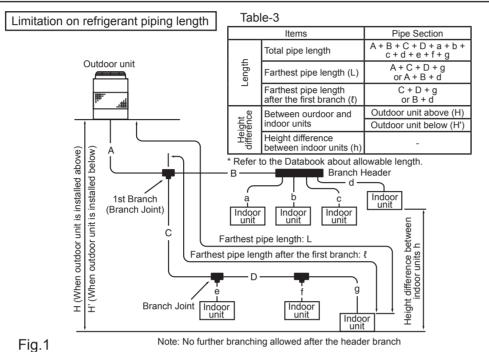
2 Please observe the items below for the mounting work.

- 1. Observe the limit on refrigerant piping length in Table-3.
- 2. Connect the header to piping or plug/pipe by brazing. Non-oxidized brazing should be
- 3. The header is equipped with stopper. Push in the stopper until the pipe to be connected

4. No limitation is applied to the mounting posture.

- 5. Be careful that foreign materials like dust will not enter into the piping at the connection
- 6. Apply insulation material to all refrigerant pipings.
- 7. The piping after the header branching can not be branched again.

Be sure to connect it to the indoor unit.



Between first branching and outdoor unit

Limitation on indoor unit connection

· Select the correct indoor unit connection referring to the installation manual of outdoor unit or the Databook.

3 | Selection of refrigerant piping size and use of header

- 1. Prepare the pipe to be connected in the field.
- 2. Determine the piping sizes of each part from Table-4 and 5. 3. The header can be connected to all piping sizes selected in the item
- 2. To match a specified piping size.
- (1) use the joint as it is.
- (2) use it by connecting the auxiliary pipe. Please conduct actual work by referring Fig 2 and Table-4 ~ 9.
- 4. Cover the branch pipe end of the header, which are not in use, with
- the plugs 1 ~ 5 provided.

Table-4 Piping size between branching (Fig1-B,C,D) (Unit:mm[in]) Total capacity of indoor units

Non-US model	US model	Liquid pipe	Gas pipe	
~140	~140 ~54		ø15.88[5/8]	
141~200	55~72	ø9.52[3/8]	ø19.05[3/4]	
201~300	73~108	ø9.52[3/8]	ø22.2[7/8]	
301~400	109~144	ø12.7[1/2]	ø28.58[1-1/8]	
401~650	145~240	ø15.88[5/8]	ø28.58[1-1/8]	
651~800	241~308	ø19.05[3/4]	ø34.93[1-3/8]	
801~	309~	ø19.05[3/4]	ø41 28[1-5/8]	

Note: If Indoor unit capacity is 651/241 or more, it can't connect to Fig.1-B directly. Then use the 2-branch joints. (Fig.1-C·D)

Table-5 Piping	(Unit:mm[in])			
Indoor u	nit model	Liquid pipe	Cas nine	
Non-US model	US model	Liquid pipe	Gas pipe	
20,25,32,40,50 06,08,12,15,18		ø6.35[1/4]	ø12.7[1/2]	
63,71,80,100,125,140	24,27,30,36,48,54	ø9.52[3/8]	ø15.88[5/8]	
200	72	ø9.52[3/8]	ø19.05[3/4]	
250 96		ø9.52[3/8]	ø22.2[7/8]	

Note: If indoor unit model is 200/72 and 250/96, it can't use the CMY-Y104C, Y108C and Y1010C-G. Then use the 2-branch joints.

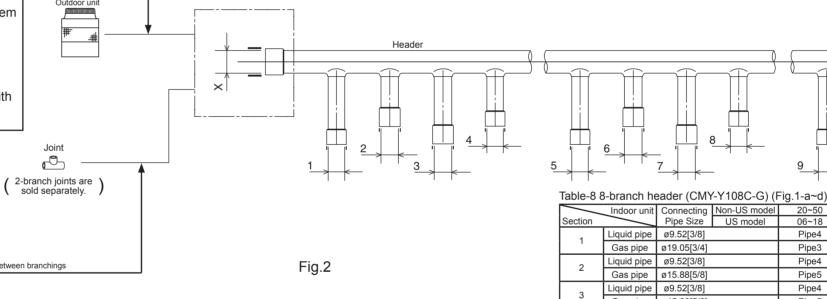


	Table-6 Between	en branchi	ing (Fig.1-B))						(Ur	nit:mm[in])
	Down s	tream capacity	Connecting	Non-US model	~140	141~200	201~300	301~400	401~650	651~800	801~
F	Pipe types		Pipe Size (X)	US model	~54	55~72	73~108	109~144	145~240	241~308	309~
	CMV V404C C	Liquid pipe	ø12.7[1/2]		Pipe1	Pipe1	-	-	-	-	-
- c	CMY-Y 104C-G	Gas pipe	ø19.05[3/4]		Pipe2	No need pipe	-	-	-	-	-
	CMV V409C C	Liquid pipe	ø12.7[1/2]		Pipe1	Pipe1	Pipe1	No need pipe	-	-	-
	CIVIT-T 106C-G	Gas pipe	ø25.4[1]		Pipe2,6	Pipe6	Pipe7	No need pipe	-	-	-
	Pipe types CMY-Y104C-G CMY-Y108C-G CMY-Y1010C-G	Liquid pipe	ø15.88[5/8]		-	Pipe1,5	Pipe1,5	Pipe5	No need pipe	-	-
	CIVIT-1 1010C-G	Gas pipe	ø25.4[1]		_	Pipe6	Pipe7	Pipe8	Pipe8	_	_

No need pipe

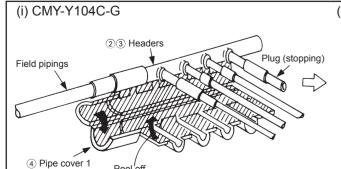
Table-7 4-branch header (CMY-Y104C-G) (Fig.1-a~d) (Unit:mm[in]) 20~50 63~140 200 250 Non-US mode Pipe Size US model 06~18 24~54 96 ø9.52[3/8] ø15.88[5/8] ø6.35[1/4] No need pip ø12.7[1/2] ø9.52[3/8] ø15.88[5/8] ø9.52[3/8] Pipe4 No need pipe iquid pipe ø15.88[5/8]

Gas pipe

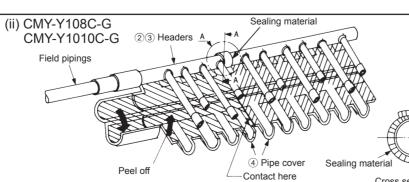
Section		Pipe Size US model	06~18	24~54	12	96
4	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	No need pipe	No need pipe
'	Gas pipe	ø19.05[3/4]	Pipe3	Pipe2	No need pipe	Pipe12
2	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	No need pipe	-
	Gas pipe	ø15.88[5/8]	Pipe5	No need pipe	Pipe11	-
2	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	No need pipe	_
3	Gas pipe	ø15.88[5/8]	Pipe5	No need pipe	Pipe11	_
4	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	_	
4	Gas pipe	ø15.88[5/8]	Pipe5	No need pipe	-	-
5	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	-	-
5	Gas pipe	ø15.88[5/8]	Pipe5	No need pipe	-	_
6	Liquid pipe	ø6.35[1/4]	No need pipe	_	_	_
O	Gas pipe	ø12.7[1/2]	No need pipe	1	ı	_
7	Liquid pipe	ø9.52[3/8]	Pipe4	No need pipe	ı	_
_ ′	Gas pipe	ø15.88[5/8]	Pipe5	No need pipe	ı	_
8	Liquid pipe	ø6.35[1/4]	No need pipe	-	ı	_
ľ	Gas pipe	ø12.7[1/2]	No need pipe	-	_	_

	Indoor unit	Connecting	Non-US model	20~50	63~140	200	250
Section		Pipe Size	US model	06~18	24~54	72	96
1	Liquid pipe	ø9.52[3/8]		Pipe4	No need pipe	No need pipe	No need pipe
'	Gas pipe	ø19.05[3/4]		Pipe3	Pipe2	No need pipe	Pipe12
2	Liquid pipe	ø6.35[1/4]		No need pipe	Pipe10	Pipe10	_
2	Gas pipe	ø15.88[5/8]		Pipe5	No need pipe	Pipe11	_
3	Liquid pipe	ø9.52[3/8]		Pipe4	No need pipe	No need pipe	_
3	Gas pipe	ø19.05[3/4]		Pipe3	Pipe2	No need pipe	_
4	Liquid pipe	ø6.35[1/4]		No need pipe	Pipe10	_	_
4	Gas pipe	ø15.88[5/8]		Pipe5	No need pipe	_	_
5	Liquid pipe	ø9.52[3/8]		Pipe4	No need pipe	-	_
5	Gas pipe	ø15.88[5/8]		Pipe5	No need pipe	-	-
6	Liquid pipe	ø6.35[1/4]		No need pipe	Pipe10	-	_
O	Gas pipe	ø12.7[1/2]		No need pipe	Pipe9	_	_
7	Liquid pipe	ø9.52[3/8]		Pipe4	No need pipe	_	_
/	Gas pipe	ø15.88[5/8]		Pipe5	No need pipe	_	_
8	Liquid pipe	ø6.35[1/4]		No need pipe	Pipe10	-	_
0	Gas pipe	ø12.7[1/2]		No need pipe	Pipe9	-	_
9	Liquid pipe	ø9.52[3/8]		Pipe4	No need pipe	-	-
Э	Gas pipe	ø15.88[5/8]		Pipe5	No need pipe	_	_
10	Liquid pipe	ø6.35[1/4]		No need pipe	Pipe10	-	_
10	Gas pipe	ø12.7[1/2]		No need pipe	Pipe9	-	_

4 | Mounting of cover (insulation material)

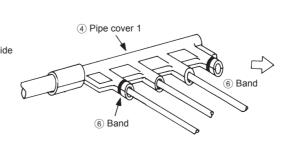


(1) Insert the ②③ headers into the pipe cover 1 (2 pcs.) respectively, peel off the paper pasted on the inner surface of the 4 pipe cover, and catch the 23 headers with the 4 pipe cover 1.

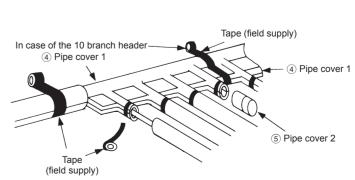


(1) Wind sealing material onto A-section of 23 headers, [thin piping-small sealing material, thick piping-large sealing material], insert each header into ④ pipe cover 1, and put ②③ headers between ④ pipe cover 1.

Note) For a part where sealing material is overlapped, wind sealing material onto the header so that the overlapped part locates at the upper side when the 10 branch header is installed.



(2) Fasten both ends of the indoor side branching of the 4 pipe cover 1 with the 6 band as shown in the figure above. Cut off the surplus of the band.



(3) Mount the (5) pipe cover 2 onto the positions stopped with the plugs 1 ~ 5 provided.

Fully seal the butting section of the pipe cover with a tape (field supply). (Insufficient sealing causes condensation dripping.)

(Unit:mm[in])