CONIC JOINT

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● Unique flareless fittings for aluminum pipes

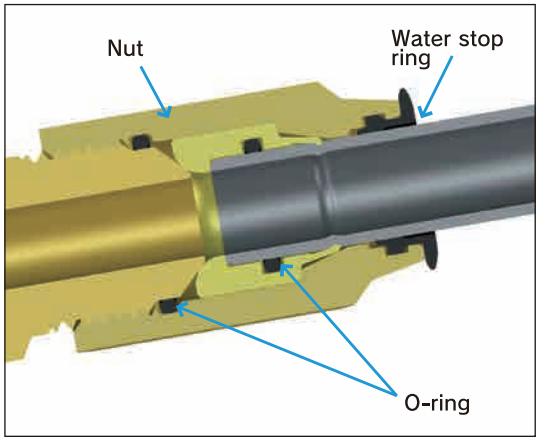
1 "CONIC JOINT" brings a breakthrough!

"CONIC JOINT" prevents corrosion due to different metal contact. (aluminum & brass)

2 It's easy and quick to install "IPO TUBE ALIGHT"and "CONIC JOINT".

INOAC developed no flare fitting to avoid risk of flaring aluminum.
"IPO TUBE ALIGHT" and "CONIC JOINT" need no torque wrench and no flaretools.

3 "CONIC JOINT" is applicable for both of Aluminum and Copper pipes.



●CONIC JOINT

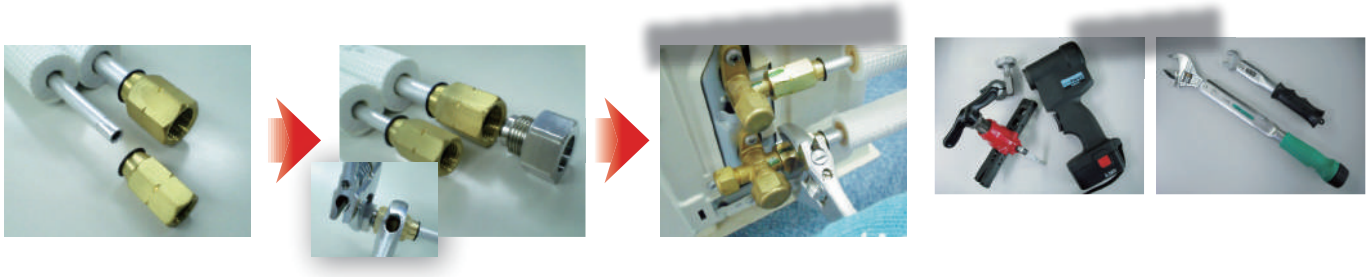
Item code	Conformable pipe size	Packing Pcs/carton
CJ-06A	1/4" (6.35mm)	100
CJ-09A	3/8" (9.52mm)	100
CJ-12A	1/2" (12.7mm)	50
CJ-15A	5/8" (15.88mm)	50

●Tightening Tool

Item code	Conformable pipe size	Packing Pcs/carton
CJTT-0609	1/4"&3/8"(6.35&9.52)	5
CJTT-0612	1/4"&1/2"(6.35&12.7)	5
CJTT-0915	3/8"&5/8"(9.52&15.88)	5

CONIC JOINT

No flare fitting (Easy and reliable two step tightening)



Aluminum causes problems after flared and overtightened.

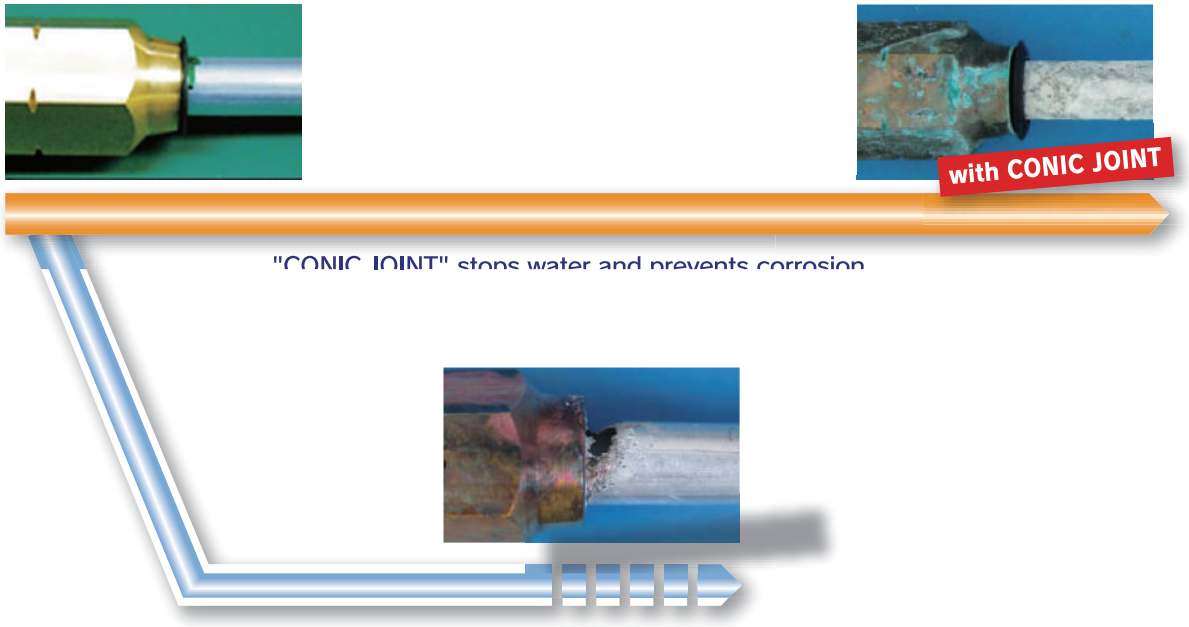
Don't take a risk !

Strength decrease after pipe flaring and nut tightening.

No flare fitting minimizes the risk of leakage.

New solution to galvanic corrosion (Water stop function)

Aluminum corrodes quickly when connected with copper or brass and in contact with water.



Tightening Tool is for connecting CONIC JOINT with IPO TUBE ALIGHT(aluminum tubes).

Tigftening (1st Step)

CONIC JOINT

INOAC

●Installation

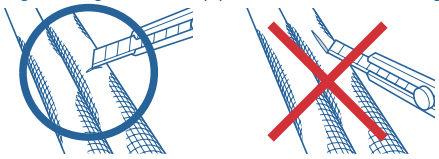
Suitable for new refrigerant (HFC) ONLY ※R410A, R407C, R404A, R507A

1 To start with. (Straighten pipe)

Straighten the pipe from coil.

2 Cut insulation

Before cutting the pipe, cut insulation perpendicularly againt longitudinal direction.
Don't cut along the long side of the pipe to avoid vertical damage on the pipe.



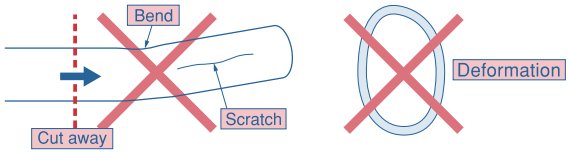
⚠Caution
- The vertical damage in contact with fitting may cause leakage.

3 Pipe cutting

Cut the straightened pipe evenly with pipe cutter to ensure its surface should be flat and smooth.

Check if there is a scratch, bend, deformation, or adhesive residue of tape on the pipe's cut surface or joint part with fitting.

⚠Caution
- Make sure the pipe dose not get deformed or oval.
- If the pipe has scratches, bend, deformation or adhesive residue of tape, cut the pipe again.

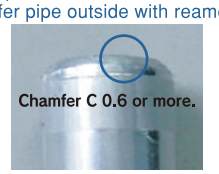


4 Burr removal (inside)

Turn the pipe's cut surface downward to avoid dirt or dust, and remove burr with reamer.
Be careful not to damage the pipe's interior.
Remove scraped burr from pipe end or inside if any.

5 Chamfering pipe (outside)

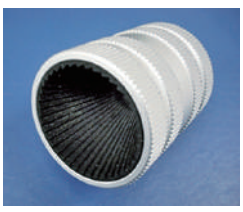
Turn the pipe's cut surface downward to avoid dirt or dust, and chamfer pipe outside with reamer.



Remove scraped burr from pipe end or inside if any.

⚠Caution
- Ensure that the pipe's outer end is well chamfered to avoid damage to the fitting.
- Improper chamfering may damage o-ring in the fitting and cause leakage.

●INOAC Original Reamer

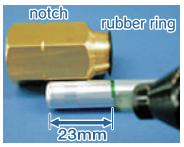


- Pipe size : From 1/4" to 1"+1/4"
- Pipe type : Copper, Aluminum, Steel
- Material : Body-Aluminum Blade-Steel

- Easier and quicker to chamfer pipes, particularly OD 1/4 inch.
- Its unique blades increase chamfering speed.
- Aluminum body and steel blades ensures long life.

6 Tightening (1st step)

Mark the pipe at 23mm from its end for proper pipe insertion. (Insertion Mark)
The fitting has notches at 23mm from rubber ring side.
Use them as a guide when marking.
Insert Tightening Tool into fitting and tighten with fingers till it can't go any further.



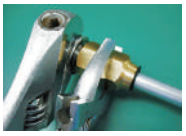
Insert the pipe straight into fitting
Be sure to insert untill the insertion mark is flush with the fitting's rubber ring. Insert the pipe again if insertion is insufficient and there is a gap beween the mark and the rubber.

⚠Caution
- Insufficient insertion may impair seal force and cause leakage.
- Do not twist the pipe. Insert straight into the fitting.
- If it's hard to insert, don't push forcefully. Chamfer pipe outside again.
- Forceful insertion may damage o-ring in the fitting and cause leakage.

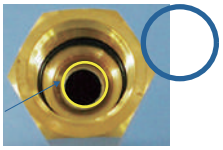
Tighten Tightening Tool with wrench untill there is no gap between the tool and the fitting. No torque control is required.
The insertion mark moves a little during tightening, but this is normal.

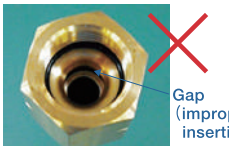
Tightening Torque (Reference only)

CJ-06A	10 N·m
CJ-09A	15 N·m
CJ-12A	20 N·m



Take off Tightening Tool and look at the pipe from the other side of the fitting to check the pipe is at the right position.





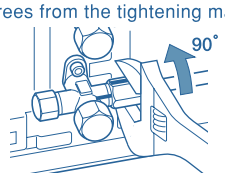
⚠Caution
- If pipe end is at the back of the fitting, cut pipe and start again from the beginning.

※Don't reuse the fitting after tightened.

7 Tightening (2nd step)

Make sure the joint part of the air-conditioner is free from scratches or damage. If any, consult with the air-conditioner supplier.
It may cause leakage if connected with copper or aluminium pipes.
Connect with an air-conditioner and tighten with fingers till fittings do not turn any more.
Mark both the fitting and the joint part for proper tightening. (Tightening Mark)

Tighten again with wrench 90 degrees from the tightening mark.



⚠Caution
- Be sure rot to overtighten 120 degrees or more.
- Don't bend pipes at or near the joint part to prevent leakage.

8 Air tight test

Check gas leakage as usual.

⚠Caution
- Wipe off soap water or gas leakage liquid when they are used.