Installation of copper-aluminum connecting pipe
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1. Notices about installation

1.1 the judgement measures for copper-aluminum connecting pipe

First: connecting pipe with pure-copper is heavier than that made of copper and aluminum in same length and same diameter. So in same condition, the lower weight’s is copper-aluminum. This is one way of judgement. And then need to use another way to judge.

Second: please move-up the heat-preservation pipe with 12cm, if you can see one black plastic-sleeve, then it is the copper-aluminum connecting pipe, if not, then it is a pure copper pipe. As shown in picture 1 and 2:

![Picture 1 copper-aluminum pipe (with black plastic-sleeve pipe)](image)

![Picture 2 neat copper pipe (no black plastic-sleeve pipe)](image)

1.2 constitutor with copper-aluminum

As shown in picture 3: both side is pure copper, and in middle is aluminum
1.3 Cranking request of copper-aluminum pipe

1.3.1 Before installation, you need to open out the pipe, please attention three steps, as follows:

Step 1: open out the pipe from slowly the farthest periphery of circle-pipe.

Step 2: During the process of opening out pipes, please use well-proportioned power, do not exert too much. At the same time, the rate must be slowly.

Step 3: open out the pipe completely, and then straighten the pipe, please pay attention to the power and the rate.

1.3.2 During installation, please notice the request as follows:

a) During the cranking, please keep a strict performing according to the table 1, and the winding radius by copper-aluminum pipe is bigger than 6cm. Most of all, do not crankle again and again in the same sinuosity.

b) Special attention, the connecting location by the end side of copper pipe and the aluminum pipe (distance is between 12-16cm from the end) is not allowed to be cranked. If could not avoid, please press slowly from the inside of cemter by both thumbs (as shown in picture 4 and picture 5).

c) The speed of cranking do not allowed too quick, the direction of cranking must along the original direction of crankle pipe.
<table>
<thead>
<tr>
<th>Step</th>
<th>Correction manipulation</th>
<th>Wrong manipulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Before crankle</strong></td>
<td><strong>Like left</strong></td>
</tr>
<tr>
<td>Step 1</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
</tr>
<tr>
<td></td>
<td>Holding pipe by the both hands and crankling pipe along the originally orientation, and moving the hands step by step. Attention, do not crankle again and again in the same sinuosity. (Correct way)</td>
<td>Crankling pipe from both end side, this way is wrong, and the power and the speed are out of control. (Wrong way)</td>
</tr>
<tr>
<td>Step 2</td>
<td><img src="image3.png" alt="Diagram" /></td>
<td><img src="image4.png" alt="Diagram" /></td>
</tr>
<tr>
<td></td>
<td>Holding pipe by the both hands and crankling pipe along the originally orientation, and moving the hands step by step. Attention, do not crankle again and again in the same sinuosity (correct way).</td>
<td>Using the way, when the crankled radius is too small, the pipe will centralize more power, so it is very easy to resulting in the middle crankle being pressed flat (Wrong way)</td>
</tr>
<tr>
<td>Step 3</td>
<td><img src="image5.png" alt="Diagram" /></td>
<td><img src="image6.png" alt="Diagram" /></td>
</tr>
<tr>
<td></td>
<td>Reaching to the goal radian step by step, attention to the crankled radius, it must fit request 1 (Correct way)</td>
<td>Keep up with this way, the pipe will distort badly, so much as break down.</td>
</tr>
</tbody>
</table>
picture4  don’t crinkle in the weld-area with the copper pipe and the aluminum pipe, please keep straight in the weld-area.

Picture 5  if could not avoid please press slowly from side cember by both thumbs, please press slowly from inside cember with both thumbs(with weak and well-proportioned power).

1.4 How to deal with the over-length of pipe

It’s not allowed to cut truncate the over-length pipe at will, during installation. if the pipe is over-length, after enswathed the pipe, you can coil the pipe in outdoor-unit rear, as show in picture 6. (you can coil the pipe as picture6)
1.5 How to deal with the short-length of pipe.

When the pipe’s length is shorter than need, please lengthen the copper-pipe from either section of the copper pipes, before welding, the welding location should be as far as possible from the spot where the copper and aluminum are connected. When welding, the connecting part of copper-aluminum pipe must be protected with wet towel, which should be close to the welding part, in order to protect the joint of copper-aluminum pipe from high temperature. As shown in picture 7.