

Installation Recommendations for Aluminum & Zinc Components

We have received several queries regarding the installation of **Aluminum & Zinc Components** (i.e., finials, ball caps, post caps), which are all pressure fit.

Problems cited include:

1. Items appearing crooked after being hammered onto the steel bar or tubing; when straightening was attempted, the pressure fit slits inside the base were loosened; thus, items had to be glued onto material to secure
2. Items are too loose or too tight after being hammered onto the steel bar or tubing

We have tried 2 different methods of installation (deburring and not deburring) a number of times to determine the outcome and the likelihood of the occurrence of the aforementioned problems. It seems that the problem is not with the particular aluminum or zinc component itself, but with the method of installation or the steel material.

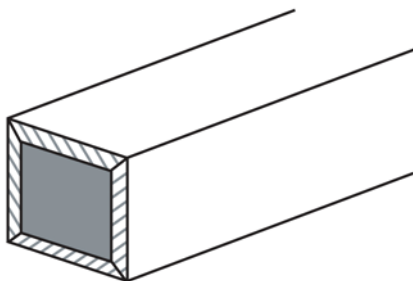
To avoid Problem 1, here is our recommendation:

Deburr all 4 edges of the end of the steel bar or tubing after cutting.

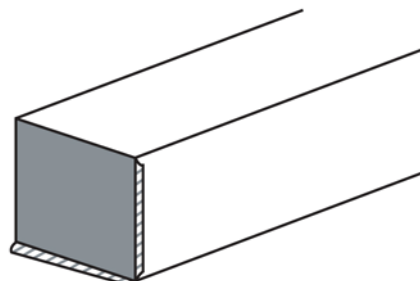
This is the most important thing!! Once this is done, the item will go on perfectly without shaving any of the pressure fit slits inside the base. If this is not done, it will leave a very sharp edge. Hence, when one attempts to hammer the item (e.g., aluminum finial AL9X) on top of the steel material and the item is not being held perfectly straight, the sharp edge will dig into the inside of the item. This is simply because metal is stronger than aluminum; as a result, the pressure fit slits inside the base become loosened.

If you want to try the exercise yourself to compare the difference, cut 2 separate pieces of steel bar or tubing. Deburr all 4 edges of the end of one piece and leave the other one as is. Try to put the aluminum or zinc component on both pieces. You will instantly notice the difference between the deburred sample and the sharp-edged sample.

Deburred



Not Deburred



We are aware that one may wish to conserve assembly time and decide to omit the deburring step. However, we would like to emphasize that there is nothing wrong with the quality of the product itself. If one feels that too much time will be expended on the deburring process and renders it not worthwhile, we would like to stress that that is a personal choice. ***We will not held be responsible if problems occur during the installation process as a result.***

To avoid Problem 2, here is our recommendation:

Verify the exact measurements of the steel bar or tubing using a digital caliper.

When items fit too loosely or tightly onto the steel bar or tubing, the item might not necessarily be at fault. It is more likely that the problem lies with the steel bar or tubing. Oftentimes, it is nearly impossible for steel mills to produce "perfect" material. Minor differences in dimensions would be difficult to detect with the naked eye. However, when a digital caliper is employed, one would be able to obtain an exact reading. For example, a 1/2" square bar or tubing will read .500 on the caliper if it is exactly 1/2". But if you measure the bar or tubing and it reads .515, then it means the material is actually .015 larger than the actual 1/2". Therefore, one should expect that the item will fit more tightly on the bar or tubing. Alternatively, if the caliper reading is .485, it is .015 smaller than the actual 1/2". Hence, one should expect that the item will fit more loosely on the bar or tubing.

A potential problem that is related to this issue is that the steel bar or tubing is not perfectly square in shape. If you measure the material on all 4 sides, you may find that the actual dimensions are .485 x .505. A reason that accounts for this occurrence could be that "seconds" or random material was purchased. Such material usually does not meet exact specifications and is often sold at a reduced cost, which could pose problems during the installation process of the aluminum or zinc component.

If none of the above situations match the problem that you seem to be having with our [Aluminum & Zinc Components](#), please cut off about 1 foot of the steel sample that you are using and send it to us for further evaluation so that we can assist you in determining what is the cause of the problem and seek a solution.



ALKU GROUP OF COMPANIES
Euro Forgings Inc.

HEAD OFFICE & WAREHOUSE

127A Aviva Park Drive, Woodbridge, Ontario L4L 9C1

Tel: 905-265-1093 Fax: 416-743-3133 Toll Free: 1-800-465-7143

MONTREAL OFFICE & WAREHOUSE

1310 av. de Valleyfield, Laval, Quebec H7C 2K6

Tel: 450-665-7979 Fax: 450-665-0472 Toll Free: 1-866-574-7979

E-mail: info@euroforgings.com

www.euroforgings.com