

# Holding The Wide End, Version 1.0

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I was faced with holding this homemade rivet in my 3 jaw chuck. The end without the head needed to be spot drilled.



The jaws can grab the head but the body is then completely unsupported. That won't work.



The solution was to make a collet out of scrap aluminum. Its outside diameter was larger than largest diameter of the part. Grabbing this collet in the 3 jaw chuck closed it and both centered the part and secured it.



To make the collet, I mounted the scrap aluminum in my 3 jaw chuck and drilled it through using the closest size drill. It didn't matter if it was a little over or under.

Then I place the collet in my bench vise and used a hacksaw to cut it open. If the hole had been a little under sized, I would have pried the collet open in the vise with a flat blade screwdriver.

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When done machining the part, I released it from the collet by forcing the flat blade screwdriver into the side slot.



Looking into the end of the rivet, you can see that the hole is nicely centered. I used a black marker to reduce glare.

In order to insure that I would never use this collet again, I saved it to my small fixture drawer.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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