

# 1964 Atlas/Craftsman Lathe Motor Supports, Version 1.0

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After over 25 years of service, one of the rubber support rings that holds the motor in my Atlas/Craftsman lathe failed. A search of the web found nothing that perfectly fit. The closest I could get had the correct outside diameter but the wrong inside diameter. This is how I machined two of these rings so they would fit.



I bought this ring from Granger for around \$16 for a pair<sup>2</sup>.



Here is the finished ring. Although not precision machined, it certainly does the job.

I ran into two problems while trying to cut the ID. First of all, the ring easily distorts when clamped in my lathe's 3 jaw chuck. Holding it lightly meant that only light cuts could be taken. Second, even with a new boring bar cutter, the rubber would not cut. I thought about freezing the ring and then trying to cut but settled on a simpler way - grinding.

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<sup>1</sup> You are free to distribute this article but not to change it.

<sup>2</sup> <https://www.granger.com/product/DAYTON-Motor-Mounting-Rings-4UFA5?nls=3&ssf=3&searchQuery=4ufa5>



The first step was to secure the ring in the chuck so it would run true. I rested two large parallels behind the ring and then tightened the jaws until snug. Over tightening the jaws would excessively distort the ring and cause lobes on the inside after grinding.

Don't forget to remove the two parallels!



My Dremel was mounted in my toolpost using a support bar. A small grinding wheel was installed.



I set the cross slide to zero at the point where the grinding wheel just touched the minimum ID.



With the lathe running at around 100 RPM and the grinding wheel turning at 35,000 RPM, I took 0.01 inches per pass. In just a few minutes I was done with the ring.

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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