

# A Half Step on a Step Ladder, Version 1.0

By R. G. Sparber

Protected by Creative Commons.<sup>1</sup>



It seems like every time I climb my 6-foot step ladder, I'm either not high enough or I'm too high.



What I need is a half-step! Then I will be at the correct altitude.

---

<sup>1</sup> This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

I wasn't sure if this would work so didn't want to modify my step ladder. Instead, I came up with this drop-in attachment.



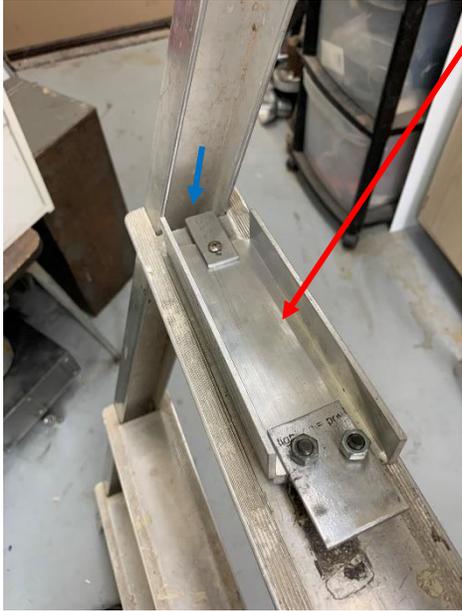
The left and right vertical supports rest on the lower step. The half-step rests on these chocks that are secured with 1/4-20 bolts. The tabs (blue arrows) at the top and bottom lock these verticals to the flanks of the ladder.

All extrusions are 1/8 inch thick. This is far thicker than the steps of the step ladder.

I drilled the tap holes for these lower tabs and then realized that the screw heads overlapped. To solve that self-inflicted problem, I ran the two screws in from opposite sides. The vertical has one tapped hole and one clearance hole. The tab has the opposite arrangement.



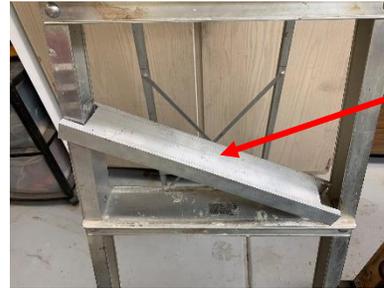
My step ladder is tapered. I made my first horizontal and then realized it was only good for one half-step position. Of course, this wasn't the position I normally need so I had to make a second horizontal. Note that the top step is slightly shorter than the bottom step.



To install the half step, I lay the left vertical down on the lower step.



Then I raise up the top end until the lower tab drops into the space next to the lower step (blue arrow).



Then the horizontal drop in.



The right side of the horizontal is raised up and the right vertical dropped in place.

The verticals are now locked in place by the horizontal and the steps below it. Only if the horizontal is raised up more than about  $\frac{3}{4}$  of an inch will the verticals disengage.



Now I can climb my step ladder and be 3½ steps up. Ah, just right!

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Subscribe" in the subject line. If you are on this list and have had enough, email me "Unsubscribe" in the subject line.

Rick Sparber  
[Rgsparber.ha@gmail.com](mailto:Rgsparber.ha@gmail.com)  
Rick.Sparber.org