

Assembly instructions for the Jerry Work GMC alignment kit

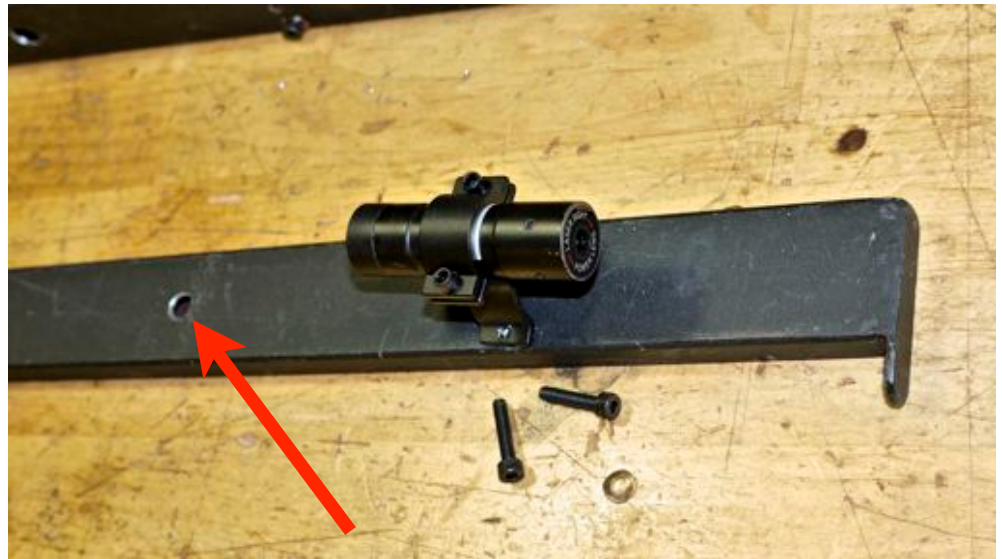
**Text and photos by
Jerry Work
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If you purchased the GMC alignment kit in knock down form you will find all the metal components fully machined and ready to be screwed together. Here is what the final



product will look like. You likely received the turn plates separately, drop shipped from the supplier to save shipping costs. Note that I eliminated the separate ride height gauge (shown here just left of the laser target) by adding the ride height screws to one of the magnetic mount laser target frame stand off arms to further reduce weight and shipping cost. There is no change in function.

The first step is to mount the lasers to the lower long arms of the stand off plates. Note the holes where the stand off pins will attach. On one side of the long arm is a small hole (red arrow) while the hole on the other side is much larger. The lasers will mount on the side with the small hole.



Use the short 4mm screws to attach the laser to the mounting base. Just snug

these up for now to allow the laser to rotate in the mount. Use the longer 4mm screws to attach the mount to the long arm with the laser pointing out, off the arm. One laser will be mounted on the right end of one arm and the left end of the other arm. The

mounting holes are larger than the 4mm screws to allow some small angular adjustment of the mount. Use the 4mm wave washer on the lower attachment screw as shown below. Note the tab on the end of the lower arm. That tab will be pointing up when the arm is assembled onto the rest of the stand off plate components.



The next step is to adjust the laser beam to be as close to parallel with the arm as you can get it. Place the arm with the laser mounted onto a long level surface like the Stabila level shown here. Measure the height of the laser beam up close to the laser and as far away as you can.





You want those two measurements to be the same. Adjust the height of the laser beam by rotating the laser in the mount. The actual laser itself is set at an angle so rotating the laser will shift the beam up or down as well as left and right. You want the laser to be parallel with the arm and you don't care where it goes side to side. In most

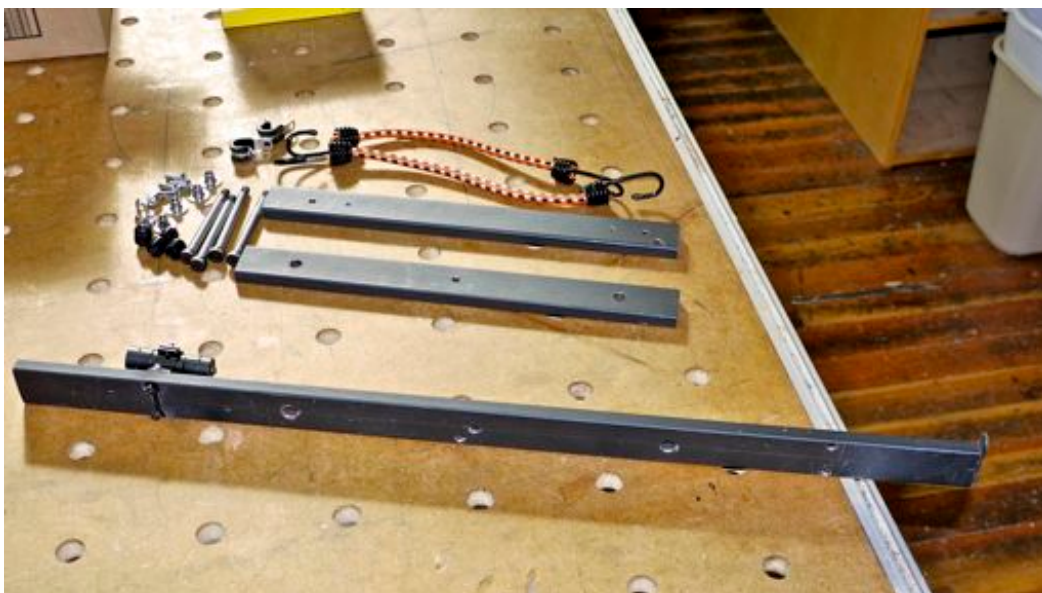
cases the height will wind up being about 40mm off of the bottom of the arm when it is parallel with the arm.

Recheck once you tighten the screws to secure the laser in its mount as it may shift slightly while being tightened. If necessary you can also adjust the laser beam by turing the four small set screws around the front of the laser. That is usually not required.



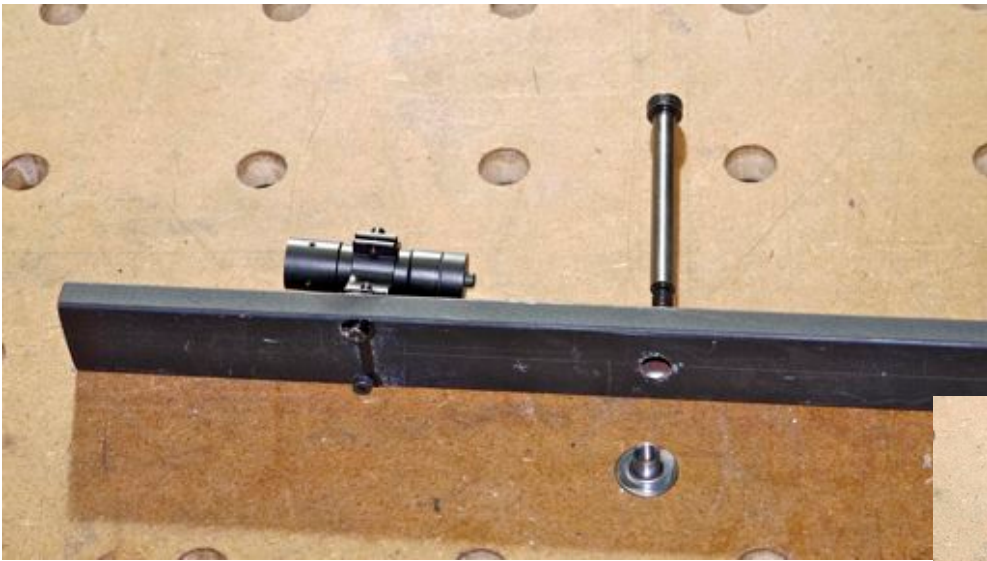
Once the lasers are calibrated to the arms, you can now assemble the stand off pins to the upper and lower arms and the vertical

member which will hold the two arms in place.



The stand off pins are precision machined and self calibrating. They are a snug fit into the smaller holes on

the arms and are held in place by threading into round weld nuts that fit into the larger holes on the outside of the arms. Snug the pins up hand tight. Do not use tools as you only

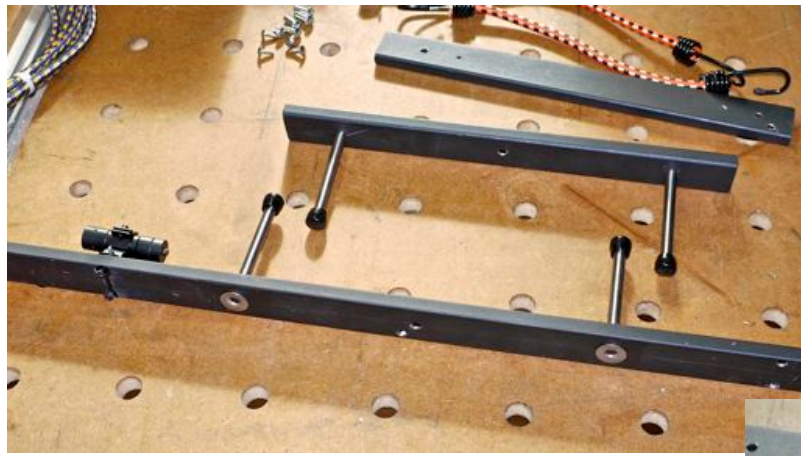


want the pins to seat well against the flat surface of the arm. Once in place, push the soft plastic cap over the end of the stand off pin. This will

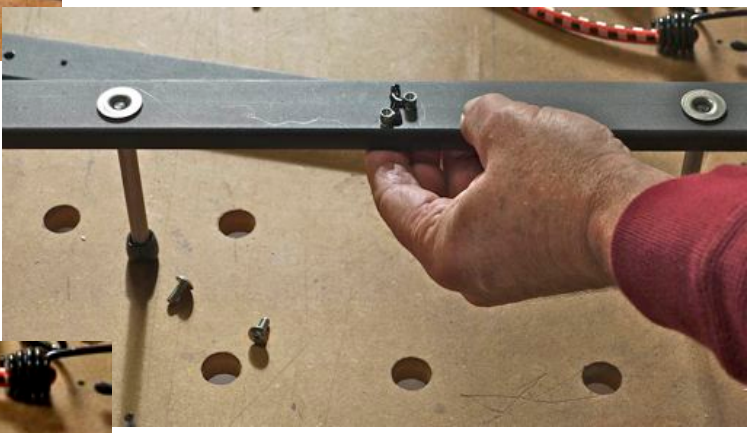


keep the head of the pin from scratching your rims.

Mount the pins to the upper arm the same way. Now place two of the 10 x 24 thread barrel nuts up from the pin side of the lower arm and hold them in place while you apply a bead of flexible CA glue or



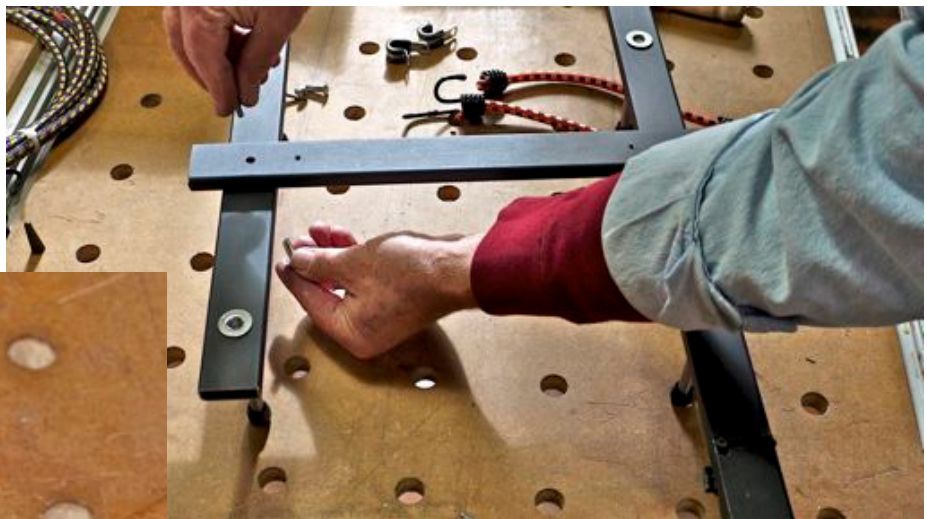
epoxy. Put the vertical member over those two barrel nuts and screw in two SS 10 x 24 screws to hold these two components together. While not critical, it is a good idea to make sure the lower arm and vertical



member are at right angles to one another. Use a square to set them, and then tighten the screws snugly.



Now fasten the upper arm to the vertical member using a barrel nut and SS screw WITHOUT any adhesive. You want the upper arm to be able to rotate to fit properly on

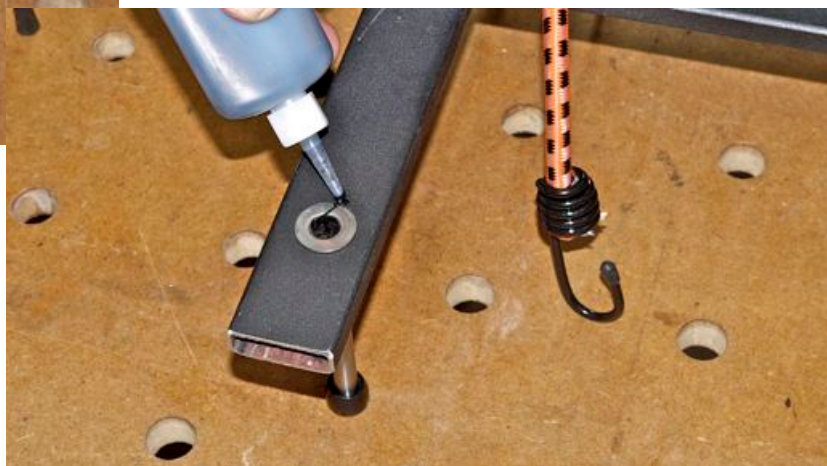


your rim even if there is some rim damage.

I suggest adding a bead of flexible CA or



epoxy to reinforce the lower arm to vertical member joint. I also suggest adding a bit of CA or epoxy to keep the stand off pins or the weld nuts from loosening.



The final step is to screw the bungee cords to the vertical members with SS 10 x 24 screws and the padded clamps. This will keep the bungee cords from getting lost over time.

Your alignment kit is now ready for use.

