

# SCOPE-TRU™ ALIGNMENT BAR

US Patent # 8745914

## Additional Instructions

### Using the SCOPE-TRU™ to check potential ring height differences when mounting your scope rings

Modern CNC machining has brought about a much greater degree of precision in various machined parts. However, there can remain some very slight differences in the machining of individual bases, and rings. In addition to this, there can also be slight differences among the contours of individual rifle receivers—whether they are from the same manufacturer—or from different manufacturers that may use the same receiver contours and screw-hole spacing. Therefore, it is always a good idea to **check for any “potential height disparity” between the front and rear rings**, before mounting your new scope into these rings.

*I have set forth THREE potential ways to do so in the information contained below*

1. When mounting standard “**dovetail front/windage rear**” style rings, set the front ring using the **Scope-Tru™** by aligning the pointer of the tool with the center of the barrel. After doing so, loosen the ring cap screws, and move the tool rearward several inches, and then very lightly tighten the front ring cap screws. Next, take the bottom half of the rear ring, and position it above the bolt plug, and against the bottom of the **Scope-Tru™**. Now, slide the rear ring along the bottom side of the tool, and up onto the top of the rear base. If it fits into this space perfectly—the height is good, and you can now proceed by completing the installation of the rear ring. (NOTE: if there is excessive space; or, if the ring doesn’t fit into the space at all, the front ring may need to be rotated 180 degrees and re-installed, or a specific base may need to be either machined or shimmed, or a new set of rings may be needed). After correctly installing both the front and rear rings, you are now ready to mount your new scope into the rings.

When mounting “**dovetail front/dovetail rear**” style rings, temporarily install the front ring by centering the pointer on the barrel. After doing so, loosen the front ring cap screws, and move the tool rearward several inches, and then very lightly tighten the front ring cap screws. Next, take the bottom half of the rear ring, and position it above the loading port of the action, and underneath the **Scope-Tru™** tool. However, because this ring has a dovetail on the bottom, it cannot slide onto the top of the rear base. Move the rear ring until it contacts the front edge of the rear base, and you will be able to see if the height is good. If it is good, remove the front ring, and proceed to install the rings as outlined in the instructions for “**dovetail front/dovetail rear**” style rings, taking care to keep both the front and rear rings in the same orientation and relationship as they were in for the process of checking their potential height disparity. (NOTE: if there is a height difference, see suggestions in the NOTE above. In some cases, it may also be possible to exchange the positions of both the front and rear rings). After correctly installing both the front and rear rings, you are now ready to mount your new scope into the rings.

2. Whether you are using regular “**dovetail front/windage rear**” style rings, or “**dovetail front/dovetail rear**” style rings—proceed with their installation as per the specific instructions that came with the tool. After both the front and rear rings are installed, take the top caps off of both rings. Next, with the **Scope-Tru™** in the bottom halves of both rings, put the **top cap on the front ring only**, and tighten it to about 15 inch pounds. Watch to see if the tool “**comes up**” out of the bottom of the **rear ring**—look for a possible gap there between the tool and the bottom of the rear ring. Next, repeat this same procedure, only this time install the **top cap on the rear ring only**, and tighten it to about 15 inch pounds. Again, watch to see if the tool “**comes up**” out of the bottom of the **front ring**—looking to see if there is a gap between the tool and the bottom of the front ring. If everything is good, proceed by mounting your new scope into the correctly installed rings. (NOTE: if there is a height difference, see suggestions in the NOTES above).
3. Finally, if you already have a set of the “pointed-end” scope alignment bars, you can use **one** of them in conjunction with the **Scope-Tru™** to check for height disparity between the front and rear rings. Whether you are using either regular “**dovetail front/windage rear**” style rings, or “**dovetail front/dovetail rear**” style rings, proceed with their installation as per their specific instructions. Next, put the **Scope-Tru™** into the front ring so that the tool projects rearward from the rear edge of the front ring, with the rear pointer of the tool just above the loading port. Tighten the front ring cap screws to about 15 inch pounds. Now, put **one** of the “pointed-end” scope alignment bars into the rear ring so that the point of it almost touches the rear pointer on the **Scope-Tru™**. Tighten the rear ring cap screws to about 15 inch pounds. Finally, viewing both of the points on the bars from the side, you can easily see if the points on each of the bars are the same height. If they are good, you can now proceed and mount your new scope into the correctly installed rings. (NOTE: if there is a height difference, see various suggestions in the NOTES above).