

## **E46 STEERING RACK ALIGNMENT TOOL TMI4610009**

This tool was developed by the TMS race crew for multiple applications, such as centering the steering rack, centering the steering wheel, and attaining repeatable alignments. This results in significant time savings when doing street or track suspension setups.

A centered steering rack prevents handling issues such as uneven bump steer, inconsistent steering resistance and unequal turning radius left to right. With this tool, every alignment will have the rack in the same place every time, which can save time when doing a quick check of toe after a hard day at the track or on the street. If your steering rack is in the same place for every alignment then the steering wheel will also be in the same place, hence eliminating the need to reset the steering wheel. Every time a toe adjustment is done and the tie rod is moved without the alignment tool, it moves the steering rack, resulting in having to recheck all alignment numbers after each adjustment, resulting in having to set up the alignment equipment after every adjustment. If you have ever used strings to set up your car you know how much having to restring the car can slow you down. If you are like us at TMS you want your car perfect every time and you want to achieve perfection as quickly as possible.

### **Application Chart:**

- E46 with TMS Rack stop kit TSU4690001(Not Included)
- E46 For cars without Rack Stops

**Parts List:** One tool



## **Directions**

1. Before starting your alignment remove the right side (passenger side) steering rack tie rod boot by cutting the band clamps and then slide the boot over toward the outer tie rod end.



2. Set the car up on the alignment equipment. Once you are done with any operations that you may need to turn the steering (such as setting caster), you can install the Steering Rack Alignment Tool. At this point it is important to notice the arrows on either side of this tool. Since this tool can be used for more than one application we have marked both sides of the tool. (Use photos and \*Notes on next page to help ensure proper use). Install by just turning the steering wheel to the right a bit, then slip the tool over the rack as shown in the picture below. Turn the wheel back to the left and use a bungee cord to hold the steering wheel to the left. This will hold the tool in place and keep the rack from moving. Make sure the bungee cord is strong enough to hold the steering wheel in place. Look at the steering wheel at this point; it should be slightly over to the left. This is due to the rubber bushing in the steering column.



3. Finish alignment. It is recommended to set camber with this tool installed in order to insure a perfect alignment.
4. Remove bungee cord and alignment tool.
5. Slip tie rod end boot back in place. Secure boot with band clamps or good quality zip ties.
6. Test drive car and center steering wheel if needed.

**\*Notes:**

If you have installed a TMS Rack Stop kit, locate the side of this tool that reads: “For cars with Rack Stops. The arrow corresponds with this application only. Arrow points to center of car when installed.



If your car does not have Rack Stops, locate the side of the tool that reads: “For Cars Without Rack Stops” The arrow corresponds with this application only. Arrow points to center of car when installed.

