Spohn Performance, Inc.

Adjustable Front Bump-Steer Kit

USE OF THIS PRODUCT IS ACCEPTANCE OF SELLER'S DISCLAIMER OF WARRANTY!

INSTRUCTIONS

- 1. Lift the vehicle and support it with jack stands.
- 2. Loosen the top nut of the outer tie rod and strike the side of the spindle with a hammer until the old pin falls out of the spindle (or use a tie-rod puller).
- 3. Measure and record the distance from the center of the inner tie rod end to the center of the outer tie rod end. This measurement will be used to set the length of the new assembly.
- 4. Loosen the jam nut at the inner end of the outer tie rod end. Use one wrench to turn the jam nut and another wrench to hold the tie rod.
- 5. Remove the outer tie rod from the inner tie rod.
- 6. Thread the new bump-steer tie rod adjuster on to the inner tie rod end and set the center to center distance as measured in Step #3 above.
- 7. Insert the tapered end of the tie rod pin in to the spindle and cinch the top Nylock nut to hold it in place. Torque the top Nylock nut to 45 ft./lbs. and the bottom locking jam nut to 60 ft./lbs. (See Photo 1 and notes on Page 2).
- 8. Using two wrenches fully tighten both jam nuts.
- 9. The final choice of the rod end height location will be determined by the front end alignment shop.
- 10. Repeat Steps 2-8 on the opposite side of the vehicle.

Alignment: Now that you have your Spohn bump-steer kit installed, you will need to find a front end alignment shop that understands bump-steer, which is essentially a change in toe-in during suspension travel. To properly perform this alignment, the technician will put your vehicle on an alignment rack so the front wheels are on movable tables.

He will then likely hook a come-along to the crossmember and one to the floor that will allow him to pull the vehicle throughout its suspension travel to measure the change in toe (bump-steer). He will then re-arrange the rod ends vertical positioning to minimize the problem.

In many cases, a subtle lowering of a car will not be enough to induce bump-steer, however, severe lowering, or the use of camber-caster plates will often cause the problem. By changing the angle of the tie rod assembly, done by extending or lowering the pin height, you can decrease your bump-steer to very small levels (less than factory).

The tapered spindle adapter does <u>not</u> fully seat into the spindle all the way down and against the hex. This is a common misconception that we'd like to clarify. The purpose of this kit is to LOWER the outer tie rod end. When seated into the spindle it will look like Photo 1 below.

Photo 1

