

# TKOSROD1439K 2013-2017 DODGE VIPER REAR TOE LINK

INSTALLATION INSTRUCTIONS  
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**Prior to any work being done, it is recommended to use collision tape or some other protective cover in area where work will be performed to minimize possibility of damage.**

**STEP 1.** You will need access to an air impact wrench, as it will be necessary to slightly loosen the rear wheel nuts prior to lifting your Viper off the ground. Using the appropriate floor jack to lift the car, turn the handle clockwise then, move the handle up and down. Use the full stroke of the piston for greater speed. Support the vehicle with the appropriate jack stands and jack stand placement. If you are unsure of how to properly use jack stands and placement, have a professional mechanic perform the product installation.

**STEP 2.** Remove both left and right rear wheels to gain access to rear toe links.

**STEP 3.** The factory toe links are located on the forward side rear spindle. See Fig. 2 for an example of the factory toe link you will be replacing. You will need to remove the emergency brake caliper and support it before removing the factory toe link. See Fig. 1. Make sure the emergency brake pads do not fall out of the caliper. The pads are not retained.



Fig. 1

(emergency brake caliper removed and simply supported with a few pieces of wood)



Fig. 2  
(factory toe link)

Many times, it is difficult to remove the factory toe link out of the spindle, especially if your Viper has been used on the track. Take your time and use the correct tools for the ball joint removal. Loosen the nut holding the taper ball joint end into the spindle. Using a brass or copper headed hammer is recommended. Lightly tap the end of the taper ball joint threaded pin after removing the nut. Take extreme care not to strike the brake rotor at this point. If the taper ball joint fails to release, lightly tap the ball joint itself with the brass or copper hammer. The harmonics of the brass or copper hammer, many times, will allow the taper ball joint to release much easier.

**STEP 4.** Begin the installation of your new TKO Motorsports Toe Link. Install the spindle pin first into the spindle itself. Make sure to install the lock washer plate and the stainless-steel split washer. See Fig. 3. Torque the M14 spindle pin nut to 100 ft. lbs. (135 Nm). Then, use a small copper or brass hammer to form the locking washer plate over the spindle arm and the M14 spindle pin nut. See Fig. 4. Make sure the lock washer plate fingers are tight against the nut flats.



Fig. 3



Fig. 4

(Fig. 4 shows the optional safety wire addition to the locking plate)

**STEP 5.** Using the factory toe link you removed earlier, adjust your new toe link to approximately the same length. See Fig. 5. This will set your rear toe close enough to start the proper rear adjustment once the installation is complete. **INSTALLATION OF TKOSROD1439K REAR TOE LINK KIT REQUIRES PROFESSIONAL ALIGNMENT TO BE PERFORMED AFTER INSTALLTION. FAILURE TO THIS WILL RESULT IN EXCESSIVE RAPID TIRE WEAR AND/OR DAMAGE.**



Fig. 5

**STEP 6.** Install the tie rod and the correct bump-steer spacers onto the spindle pin. Installing the spacers in the correct locations and sequence is critical for proper operation and to zero out the rear bump-steer. See Fig. 6 & 7 for the correct spacer sequence and installation. **NOTE: PICS ARE TAGGED ‘UP” AND “DOWN” FOR REFERENCE.**



Fig. 6

UP

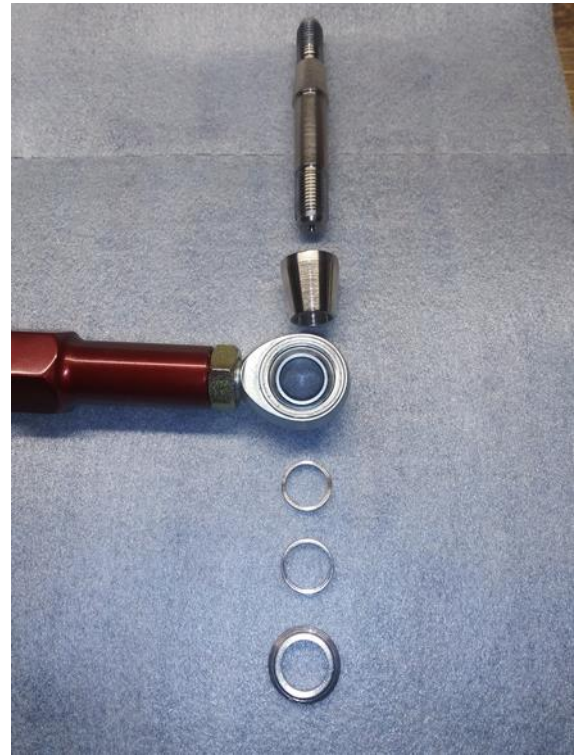


Fig. 7

DOWN

**STEP 7.** Install the chassis side, toe link mount, lock out plates supplied in your hardware kit. When installing, you must make sure the points on the lock out plates (red anodized aluminum light weight squares) are pointed up. See Fig. 8. Install the black anodized rod end spacers into the inboard side rod end. It is not critical which side is inboard (left hand threaded or right hand threaded). Make sure you are consistent on the passenger and driver side during the installation. Torque the M12 toe link bolt on the chassis side to 62 ft. lbs. (84 Nm).



Fig. 8  
(lock out plates pointed up)



Fig. 9  
(ALWAYS TIGHTEN JAM NUTS)

**STEP 8.** Once you have installed the toe link, make sure you tighten the rod end jam nuts even if it's just temporary until you get a proper vehicle alignment. See Fig. 9.

Repeat steps 1-8 to install the toe link on the opposite side of your Viper.

