

# JK ProRock 44: Choosing the Right Housing for My Jeep

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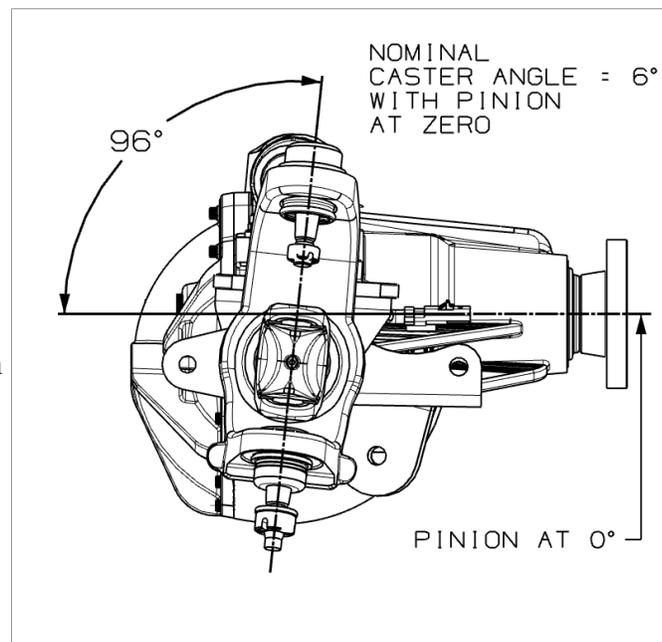
Dynatrac manufactures several different versions of the JK ProRock 44 axle housing. This guide is intended to provide information with respect to the replacement housings for JK vehicles which will maintain compatibility with the factory electric locker, shafts, and wheel end. In this category there are two specific housings to choose from. These housings are quite similar to one another, however, there are key differences in the pinion angle and caster. The first housing is configured such that it exactly mimics the stock Dana 44 configuration for caster and pinion angle. The second housing has additional caster and pinion angle added during fabrication. The goal of this document is to provide the end user with enough information to make an educated choice between the two product variations.

The stock Dana 44 Rubicon and standard ProRock 44 axle housing come from the factory with 6 degrees of angular separation between the caster axis and the pinion axis. When installed in the stock position the caster is configured at 4 degrees with the pinion up 2 degrees. This is the way the standard ProRock 44 is configured to replace a stock axle. The ProRock 44 Unlimited housing has 10 degrees of separation between the pinion and caster axes. This allows the end user to run between 6 and 8 degrees caster with a pinion angle between 2 and 4 degrees pointed up.

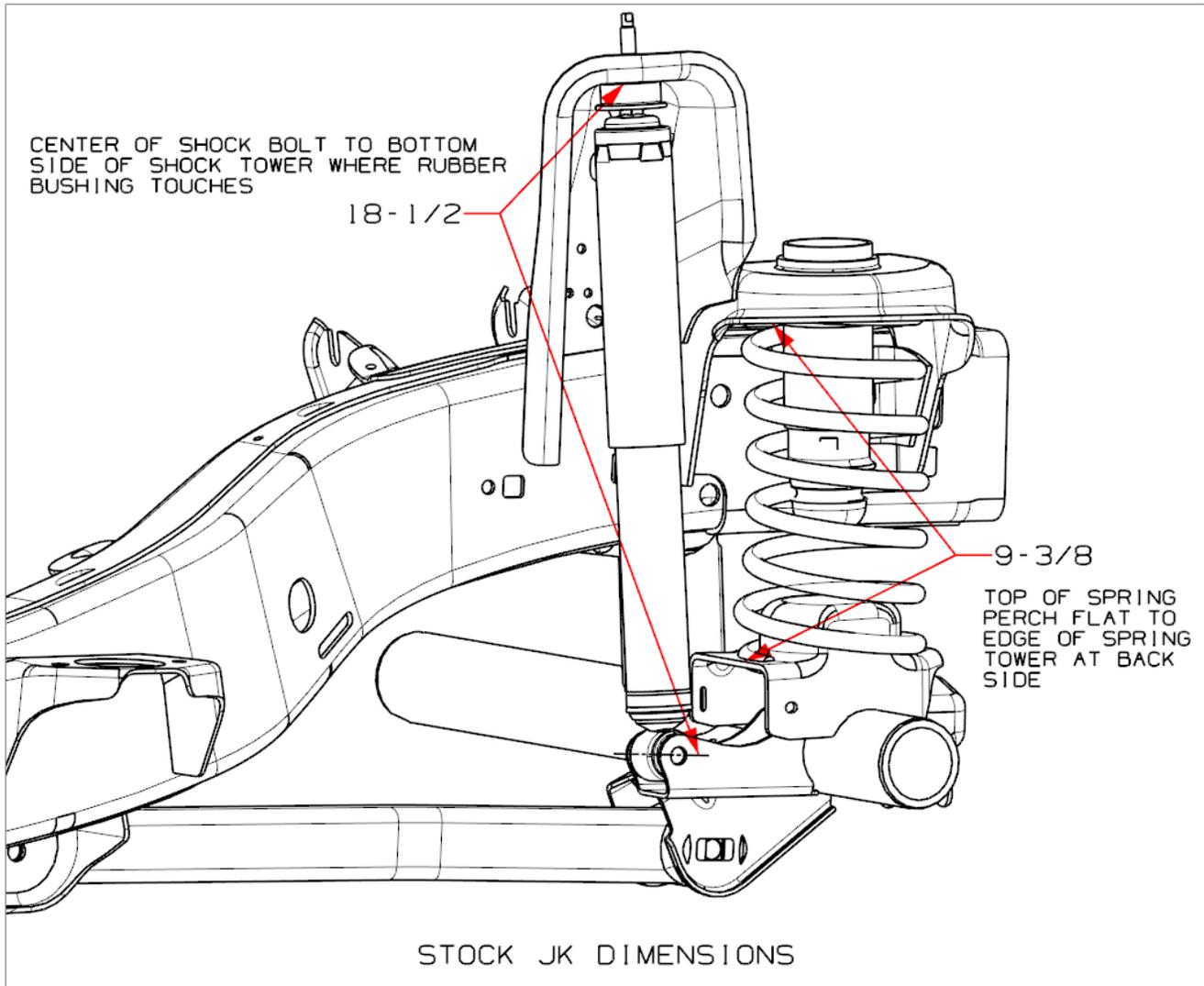
The increased caster helps with vehicle handling and steering. It also allows more flexibility with respect to the pinion angle in order to eliminate unwanted driveshaft vibrations. This axle housing is particularly well suited to JKs with 3 or more inches of lift and adjustable control arms. While it can be used with less lift it may be difficult to install on some lift kits with 2.5" or less lift. This is because these smaller lifts generally do not come with adjustable control arms. In order to install the modified caster axle adjustable control arms will be necessary.

Adjustable control arms are necessary because the pumpkin has a cast in upper control arm mount. This means that the relationship between the upper control arm and the pinion are fixed relative to one another. In order to adjust the housing up to the 4 degrees of pinion angle the upper control arm length will need to be extended.

In some cases it may be difficult to determine exactly how much lift a kit yields when installed on a Jeep. This is due to weight variations and configurations unique to each particular Jeep. These factors will ultimately influence the vertical distance between the pinion input at the axle and the transfercase output, and hence the angle of the front driveshaft. As indicated above Dynatrac is recommending the increased caster angle axle for Jeeps with 3 or more inches of lift. Jeeps with 2.5 inches of lift should consider the stock configuration housing first. In order to measure the amount of lift on your Jeep the following diagram has been constructed. These



measurements are nominal values for a stock Jeep sitting on level ground with the stock suspension. These measurements have been provided as a reference point in order to evaluate exactly how much lift is on your Jeep. Simply measure the points on your vehicle and compare them to the stock measurements. The difference between the two measurements corresponds to the added lift from the kit.



Measuring the Jeep in question and comparing the information to these numbers will help determine which housing is a best fit for your particular vehicle. However, it is important to remember that this information is indented to serve as a guideline. There are few absolutes in the world of Jeeps and what works for one Jeep may not be ideal for another. In the case of the standard ProRock 44 configuration, Dynatrac has successfully installed many of these in JKs with all types of suspension lifts big and small. Two of these Jeeps have been extensively tested by Dynatrac and both of them have lifts larger than 3 inches with the stock configuration housing. In both cases the vehicles are comfortable to drive and without noticeable vibrations from the front driveshaft. Its possible to improve performance in some cases and customer demand has lead Dynatrac to offer the ProRock 44 Unlimited housing. Please contact a member of our sales team for additional information or questions.