#### Jeep (2018-Current) Installation Instructions

\*\*\*<u>THIS IS NOT A BALLJOINT</u>. INSTALLING THIS SYSTEM LIKE A BALLJOINT AND TORQUING LIKE A BALLJOINT WILL NOT WORK AND YOU'LL BE REDOING WORK. PLEASE FOLLOW THE INSTRUCTIONS BELOW AND YOU'LL HAVE A FANTASTIC DRIVING JEEP.

- 1. Place entire kit in the freezer for at least an hour. If you take it apart, take pics and note the order in which it is assembled. Getting the cup assemblies cold will help them press in easier with less effort on your part.
- 2. Begin by pressing lower assembly in from the bottom of the C. <u>DO NOT</u> remove the bearing from the cup, press it in as an assembly. The shoulder will stop the cup from being pressed in further. Once on the shoulder, stop. Press <u>ONLY</u> on the cup itself and <u>NOT</u> the spherical bearing, this will prevent damage. (<u>NOTE</u>: the lower cup has a taller shoulder & a plunge cut ID on the opposite end.) Keep the seal & Delrin shim on the top side of the assembly to prevent debris from entering.



3. Press upper assembly in from top of C in the same manner as the lower assembly outlined in the previous step. (NOTE: the upper cup has a shorter shoulder.)



4. MOVING ON TO INSTALLING STUDS INTO OUTER KNUCKLE: Slide lower stud into the taper of the outer knuckle. (NOTE: this is why you left them assembled, they look the same. If you didn't, the lower stud has a shorter thread on the tapered end than the upper stud.) It is not uncommon to have to tap the top of the lower stud for the threads to clear the hole in the outer knuckle. The stock knuckle is a metric thread OD instead of a standard thread OD which is .0015" larger.



Prior to installing upper stud, insert the stock caster/camber bushing if it's not already in the outer knuckle. See pic above for reference. Using the hex pockets on the top of each stud, **TORQUE BOTH 9/16" NUTS TO 40 FT/LBS TO SEAT TAPERS.** 

5. Slide steel spacer over the lower shank. Grease the inside of this spacer or the lower section of the shank to prevent corrosion from salty conditions. Once this is done, slide .048" thick shim over the top of that spacer as pictured below.

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6. Grease the underside of the lower bearing and the top side of the upper bearing prior to sliding the outer knuckle studs into the bearings. This does not lubricate the bearing itself, it only impedes water/debris intrusion, bearings are pre-lubricated upon assembly. After sliding the studs through each assembly you should see the threads through the tops of each as pictured below:



- \*\*The spacing of the upper as pictured above is normal and just not seen with a balljoint due to them having a grease boot. To verify this, check where your steering stops contact. This will indicate the correct vertical position of the outer knuckle in relation to the inner C.
- 7. After sliding outer knuckle onto inner C, place o-ring seal over stud (center it), then slide .048" shim over the top of the stud, and hand tighten ¾" low profile nylock as pictured below:



- 8. Torquing top nylocks of each assembly:
  - a. YOU MUST TORQUE THESE NYLOCKS IN THIS ORDER!!
  - b. Torque top nylock of **lower** assembly to 35ft/lbs.
  - c. Torque top nylock of <u>upper</u> assembly to 25ft/lbs to 30ft/lbs.
  - d. Additional torque to the **top nylock of the upper assembly** will stiffen steering. IF you experience this, it is adjusted with the ft/lbs of torque applied to this nut.
- 9. When you are finished with assembly, use a paint pen to mark the top of each nut/stud as pictured below. Incorrectly marking it will give a false indication of loosening. <u>Visually inspect marks after driving 100 miles</u>.



#### **NOTES:**

<u>-Upon initial drive after install</u>: the steering will feel more responsive and firmer. This can be adjusted with the <u>TOP</u> nylock of the upper assembly. It is recommended that you drive 500 to 1,000 miles to break in the assemblies as the bearings themselves will have some rotational resistance. The more rotations the knuckles cycle through the quicker this period will be. Driving straight down the highway for 1,000 miles will not suffice.

-The use of thread locker in conjunction with the nylocks is acceptable.