

## Stage 8 Locknuts

As we always push for safety and much of the time, find that safety in new technology, we were excited to hear from another team that there was a new Spindle nut available that we haven't yet seen. I did some research and after seeing the concept, ordered up a set. The reason I'm writing this story is simple. This product will completely eliminate the deadly issues we've had...PERIOD. If you're running a Dana 44 or 60 spindle, you should consider Stage 8's new "X-Lock, locking spindle nuts.



Here's the sequence Mike Foster (one of our crew) went through to swap to the new spindle nuts:

After jacking the wheel off the ground and properly supporting the axle with a jack-stand, Mike pulled the drive flange cap by removing the three Allen bolts



Then Mike used a small pick to remove the spiral clip that holds the actual drive "slug" in place. This is a PolyPerformance Drive Flange by the way...other brands may remove/install differently.



Using a bolt taken from the flange cover we just removed, Mike screws it in a few turns to create a handle to pull the slug out with. If it doesn't come easily, Mike can just spin the wheel to relieve possible tension on the axle or flange splines. Note the dirt on the outer edge of the outer flange splines???.someone's in trouble for installing a dirty flange during a speedy swap at a recent event ;-)



Next, we removed the Spicer spindle nuts shown in the photos above.

FYI, we never had to remove the wheel or any other components as we're only switching the spindle nut. This makes the swap easy and quick.

Now for the order that the Stage 8 X-lock goes together. As it was impossible with my camera to show you the install inside the hub, we'll just show you on the ground how it works.

First, the large flat washer or "spacer" is installed over the spindle and up against the outer surface of the outer wheel bearing. This washer does not have any tang and is the same on both surfaces, so it can be installed with either side facing the wheel bearing. Next, the main locking device (let's call it the "star") goes in place. It has a tang that must be indexed so the tang slides into the keyway in the spindle. The "star" can face either direction as both sides

are the same. You can see how beefy this piece is. NO CHANCE that the tang or indexes will fail!



Follow that with the single adjuster nut. It is much thicker than the nuts anyone else supplies and is cut with 8 reliefs instead of the usual 4. This gives you two different index option with your hub socket. That nut is tightened to the proper torque specs for your application...be careful to ensure you are using the wheel bearing nut torque specs and not the jam nut specs as the jam nut specs are far too tight for wheel bearing preload. Keep in mind, this design does not use a jam nut, so you'll only need to know the torque spec for the proper wheel bearing preload.



Next comes the locking assembly that I'll call the "spider". It can be installed with a set of snap ring pliers as there are two holes simply for holding it that way. You don't actually "spring" them with the snap ring pliers, you only hold them. That was a great idea as installing and pulling those Spicer washers is a hassle if you don't have tiny fingers. Indexing the Stage 8 version is a cakewalk.

Anyway, the "spider" has 8 different possible positions but only one will fit depending on the positions of the "star" and the adjuster nut. Mike didn't get lucky and get the right 1 out of 8 on the first try, but the 4th position he tried slid right in. In this photo, you can see how the "spider" engages the "star" AND the adjuster nut in 8 different places apiece. That means you'll have far more holding power that you'd ever need.



Now comes the snap ring that holds the "spider" pressed tight into the "star". Notice there are two different snap ring slots? This makes it nice because you can install the nut either direction and you can still assemble everything...another good idea by the manufacturer.







So that's it! Simple and effective is an understatement. Mike put it all together in a matter of minutes and knowing the hassle it usually is doing the Spicer spindle nuts, we're stoked to not have to keep adjusting the nut, installing that washer with a million holes, only to find you have to change your preload 5 more times until the locking washer indexes properly...then if all the planets are not in alignment you'll still have issues, just like the ones I described at the beginning of this article.

You know, it was tough admitting we had a nut problem ;-) But I know for me, I'm glad to have found the solution.



Stage 8 - Ask your friendly Pirate 4x4 vendors if they are a retailer!