Mopar 8.25 Rear Axle

All info is compiled from various threads and forums for your upgrading pleasure. I'm not the expert, just the guy doing the research and wanted to share. No claims that this is 100% complete or accurate.

Built by the Dana Corporation, the housing is cast iron with tubular steel axle tubes pressed and welded in to form a complete carrier and tube assembly. The gear assembly is accessed by removing an inspection cover having 10 bolts. 8.25" axles use either the "7260" or "7290" style U-joints.

All 8.25" rears had 3" axle tubes with large bolt pattern (5 X 4.5" bolt circle) axles. Units with a 2.45:1 gear ratio have a special case that will not accept any other gear ratio. The axles are retained by a c-clip on either side. All axles were 27 spline until 1997 when they were upgraded to 29 spline.

They can be found in 1973 and newer A body cars with the 4.5" BBP axles. There were two different housings. One came with 2.21:1, 2.45:1, & 2.71:1. The other with 2.94:1 and higher gear sets.

The 8.25 can also be found in 1984 to 2001 XJ Jeep Cherokees (note the year split for the axle spline).

- XJ Jeep Cherokee 1984 1996 = 27 spline axles
- XJ Jeep Cherokee 1997 2001 = 29 spline axles

Check this forum for a XJ Jeep spec guide http://www.jeepforum.com/forum/f11/c...k-specs-26256/

You can swap the center section from the Jeep housing and drop it into the A body housing. The Jeep gear ratios are 3.55:1 in some cases and they came with Sure Grip Differentials. They will fit into the A body housing with the 2.94:1 gear sets, not the other housing. The diffs from the 84 -96 Jeeps will let you use the A body axles as the splines are the same at 27.

8.25 Rear Disk Brake Upgrade

The rear disk brakes from a 1994-1998 ZJ Jeep Grand Cherokee 8.25 are almost a bolt-on affair to the earlier 8.25 rear. To view an excellent step by step, check the link to this Jeep Forum from 2008. http://www.jeepforum.com/forum/f11/z...-truth-607435/

Tips compiled from different Forum threads:

- One big help: if a Cherokee has ABS, then it does NOT have the 8.25" axle. (All ABS Cherokees got the Dana.)
- if you go with a jeep 8 1/4 be careful because the 8 1/4 looks a lot like the dana 35. The dana 35 will have smaller tubes but at initial glance and if you are not used to working with them, the centers look very similar. Make sure you don't get a dana 35 thinking its an 8 1/4.
- The 8.25 rear had two different size carrier bearings over the years, pre '75 they use the smaller sized bearings and '75-96 uses the large bearing (don't know the exact size offhand), the carriers are interchangeable as long as you use the correct bearings and is the right spline. In '97 the spline count went from 27 to 29. If your going to swap carriers at least put a sure grip in it and if you already have 3.21's it's not worth the hassle to put in 3.55's you'll barely notice the difference.

- I think It's just the carrier that's different, I called Dr diff about swapping my 2:45 to 3:55. I have a sure grip with 3:55s from a '78 powerwagon. He said all I needed was a kit from him to swap it into my housing.
- just built an 8.25 for my 66 from a 74 dart. it had 2.45's, just remember the carrier is special to 2.21's and 2.45's. 2.74's and up have a different carrier, the ring gear is approx 7mm farther left of center compared to the 2.74 and up carrier. also, there's 2 different carrier bearing sizes. if you swap out the gears and carrier pay attention to that.

I found a FABO thread for the disk brake install on the 8.25 axle.

http://www.forabodiesonly.com/mopar/...d.php?t=301415

Here is another 8.25 Jeep swap FABO forum with some important measurements and U joint info.

http://www.forabodiesonly.com/mopar/...ght =axle+perch

