

Dear gents,

while having my rear axle assembly on the bench it made sense to replace the propshaft's center bearing of my MY2000 XJR.

I did not experience any major issues, but since my car got 140k mls on the clock it was a good opportunity to replace it. With the propshaft in situ I couldn't determine any damages to the rubber and/or the bearing itself. The only noteworthy was a noticeable ability to move the propshaft laterally and up and down due to (in my mind) softened rubber. And maybe some intermittent and slight vibration around 85mph.

Since I didn't find any other source for the bearing than Powertrain Industries I ordered one bearing from them for 126 USD + 40 USD freight to Germany. PayPal payment was no issue and so the bearing arrived astonishingly one week later with FedEx.

Having had the rear axle off the car the disassembly of the propshaft was quite easy. I had to release the front mufflers from the cats, which freed up some additional space working with the spanners and ratchets to loosen the three bolts connecting the jurid coupling to the transmission's output flange. As recommended by the workshop manual I marked the mounting position and even the bolts and nuts.

I had the transmission in "neutral" so that I could turn the driveshaft while loosening the bolts. I used a spanner and the walls of the transmission tunnel as "counter-weight" to hold the nuts in place while undoing the three bolts with a ratchet and an extension.

The workshop manual states not to remove the jurid couplings from the propshaft – but when marked and reassembled in the same order this should be of no problem.

Next on the list to disassemble was the handbrake mechanism with its bracket. I just let it hang after dismantled from the body.

Having removed the four bolts of the center bearing mounting plate I took the propshaft off the car. Caution: the propshaft is a two-piece part. The two parts are coupled by a splined shaft connector just in front (direction of travel) of the center bearing. Please pay attention to not separate the two parts unless they're on the bench or unless you have the safe opportunity to do some marks before separating.

My propshaft had a bigger tooth functioning as a guiding pin for correct re-assembly, but that's nothing I'd stake everything on (fig. 3).



Location: none

Figure 2

For removing the bearing the two parts have to be separated. Don't forget to do the markings ;-)  
No special tools needed for separating the two halfshafts – just pull them carefully apart. A plastic collar protects the connection against dirt (fig. 3).



Location: none

Figure 3



Fig. 3 shows the splined shaft + collar and fig. 4 the toothed hub with the recess for the guiding tooth.



Location: none

Figure 4



Location: none, old vs. new center support bearing

Figure 5



Location: none, old vs. new center support bearing

Figure 6

I reckon there are some special tools for pulling the old bearing off the splined shaft, but the following worked for me:

With an angle grinder I cut the bearing's housing and the rubber (fig. 7). With the housing discarded I trimmed the rubber with a knife so that a metal ring was revealed (see fig. 8, beside the vise).

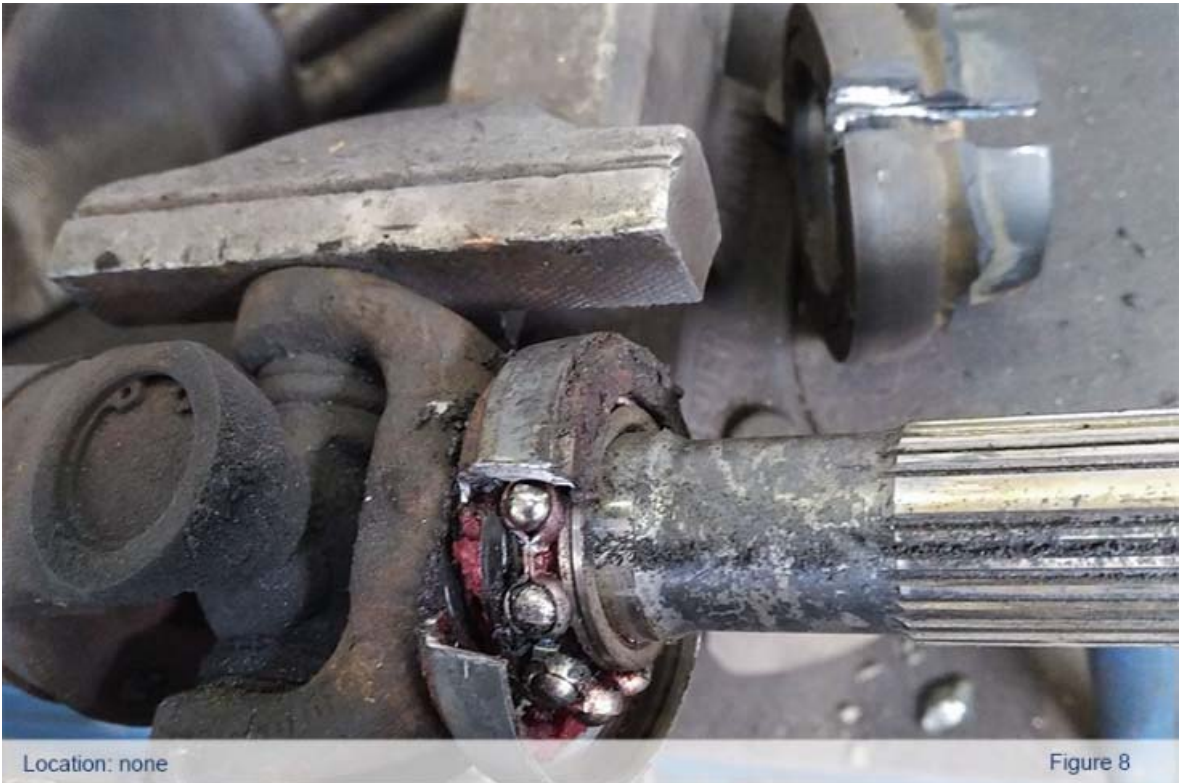


Location: none

Figure 7



Cutting the metal ring with the angle grinder was an easy task, so that finally the actual bearing was exposed (fig. 8).



Cutting the outer race of the bearing on two opposite sides allowed me to remove all the bearing's interiors so that finally only the inner race remained on the splined shaft (fig. 9).



With a small diameter angle grinder I incised the race on two opposite sides so that I could finally split and/or widen the race with a chisel and a hammer. Doing so I could discard the inner race from the shaft without damaging the shaft itself.

If you got no small diameter angle grinder you can try drilling small holes side by side along the axis of the shaft. Watch out to not drill the shaft itself – a depth of 1/2 or 2/3 of the race's thickness should be sufficient. Then strike the race across the holes with a chisel to relieve tension within the race's steel. Repeat this on another or two positions and you'll be good to remove the race.



After cleaning the shaft and its teeth I CAREFULLY hammered the new bearing in place with a small drift punch. Watch out to not hammer the red rubber of the bearing and to NOT strike accidentally the splined shaft's teeth! This will result in issues when pushing the shaft into the toothed hub as it's a tight fit!!!

Re-assembly of the propshaft is reverse to its removal.



Location: none

Figure 11