

4 Wheel Steer Conversion

By Chuck Watford

PART ONE

Richard T. had asked Rod to install a four wheel steer kit on his A5 mule. Rod asked me to help, and we thought it would be a good opportunity to document the process.

Phil B., Rod N., owner Richard T, and I all met at Rod's mule barn Saturday morning. Rod's dad, Bobby, supervised the group! We started about 9:00 a.m. and finished up about 2:30 p.m.



We removed the rear wheels, axle nuts and hubs. See the tutorial on dust boot replacement which explains how to remove the axle nut lock pins.



Next step was to remove the non-steerable drop housings from the rear axle.



The covers can be a little tough to get off the dowels, go slow and take your time, don't break anything!



Watch the axle drive gear when you remove the housing, don't let it fall on your toe!



Here's the inside of the drop axle cover.



And here's the inside of the drop axle.



Time for lots of gasket scraping. These gaskets are tough, so be sure to remove all traces of the old gasket.



Did I mention lots of gasket scraping? Used the tractor to hold it up and enlisted help.



Cleaning and inspecting the bearings.



We found one inner race bad.



But since the inner and outer races are the same, we were able to use one from the old housings.



Inspect and grease the needle bearings.



In our case, we needed to reuse several parts from the old 2-ws hubs. This shows removing the wheel bearing.



Here are the parts we will be reusing; the wheel bearing and lock ring, the drive gear and idler gear, and the axle spacer



The old wheel bearings are installed into the steerable knuckles.



And the spiral lock rings are installed.



A new gasket is installed.



And the new cover is installed. We had some trouble here, sharp eyes will notice that the dowel pins are in the axle housing and also in the cover! It took us a few minutes to figure this out! Install several nuts and bolts and then check the clearance on the axle drive gear. This procedure is described in TM 9-2320-246-34 on page 5-22 and should not be skipped.



Once the correct clearances have been achieved, it's time to install the cover for the last time. A good coat of gasket sealer



And install all the lock washers, nuts and bolts.

Continue to PART TWO