How I Rebuilt the Dearborn 6' Lift-E Disc Harrow, by Wayne Wiseman

I've owned a Dearborn 6' lift type disk, Model - Lift-E for over thirty years that always set out in the weather. I wanted to save the disc because it was a Ford disc.

The bearing assemblies needed to be rebuilt. The bearing assemblies are made out of white metal and the bearing assemblies must be replaced and cannot be rebuilt. The parts are available from AgriSupply.com. http://mower-

blades.agrisupply.com/search#w=disc%20harrow%20bearings&asug=disc%20harrow

Because of the cost of the replacement bearings, and that I only use the harrow to disc my garden once a year, I thought that I would rebuild the bearing assemblies myself. The bearing assemblies come apart in the middle after taking out the two carriage bolts. Each bearing has a top half and a bottom half. The bearing assembly tops and bottoms mount over a spool that has grooves to keep the shaft from moving right and left.

I removed the complete shaft and 6 disc blades by removing the large square nut on the end of the shaft. It took a lot of heat to remove the nut, but I was finally successful without damaging the threads.

I then removed the bearing assemblies and placed them on the work bench. I took out the two carriage bolts and now the bearing assembly was in two halves and the spool was visible.

I used thin metal shims to get the correct tightness and then measured the shims and mine measured .040 on the top and .040 on the bottom half. I found a sheet of metal that measured .040 thick and cut 6 pieces 3/4" wide and 3" long. I used heat on the metal inserts and formed the metal inserts to fit the bearing assemblies. I had a total of 6 metal inserts in each bearing assembly - 3 on top and 3 on bottom. I spot welded the ends of the metal inserts so that they would not spin in the bearing housing. The metal inserts are on the same principle as engine rod inserts.

I placed grease around the spool and then bolted the top and bottom bearing assemblies together with new carriage bolts and turned the spool by hand to make sure there was no play and the spool turned freely. If they do not turn freely then take an angle grinder and do a little touch-up grinding on the metal insert that is a little high. You can tell which insert is too high by looking at the grease thickness.

Before you take the disc blades and bearing assemblies off the shaft, make notes or take pictures so you will know how to install the disc blades and bearing assemblies on the shaft. Also note the position of the grease fittings where they face the front or back. On mine I positioned the grease fittings on the front gangs toward the tractor and on the back

gangs, I placed the grease fittings toward the rear.

It takes a lot of time to make and fit 48 inserts. There are a total of 6 inserts for each bearing assembly and a total of 8 bearing assemblies. I would not recommend using this procedure if you are going to use the disc a lot but I'm sure if you keep the spools running in grease they will last longer than you think.

Here's a photo of my completed project:



The N Tractor Club has the owner's manual for this disc harrow if you need it.

http://www.ntractorclub.com/manuals/implements/harrows/Dearborn%20Series%20E%20Tandem%20Disc%20Harrow%20(Lift%20Type)%20-%20A&O%20Instructions.pdf