A day with rear hubs and water throwers

Fitting the water throwers turned out to be more labour intensive than I thought. A little bit of research on Jaguar Enthusiast site gave me some experience tales of other people and some insight on what to expect. Heating the thrower and quickly fitting it around the machined edge on the hub seemed the way to go.

There are a couple of hurdles to overcome. First, when the thing gets hot gloves are mandatory which makes handling the piece more cumbersome and handling the thrower quickly but steadily over the hub proved to be quite a dexterity challenge.

Next, to much heat will ruin the passivation layer on the zinc, so I do not want to heat them up to the point where that happens.

And third, the heating will expand the part, but we're talking parts of millimetres here; I figured about 0.5 mm difference between the cold and heated part. This means we'll have to make sure the cold part is brought within that range. There's also not much room for error.

So, first thing was to do a trial run to get some feel for the procedure and the measurements. The cold part inner diameter was about .8mm smaller than the diameter of the edge. Heating did not make it possible to fit the part but clearly showed a difference in size. I had the hub in the freezer overnight which may have helped a bit too, size-wise.

So, the only thing I could think of was putting the ring in a reference position (cold) and marking how far the circumference would go over the edge by pushing sort of in the same manner I would be able to do while handling the hot part. Marking the arc on the ring and then carefully sanding the complete inner diameter of the thrower to enlarge it a little, fitting the piece regularly.

After quite some sanding and trial fitting and two 'hot sessions' it dropped on!

You can see the reference mark and some burn traces in the bottom part of the picture. I'm not sure if you can make it out on the picture below, but the hard work paid off. Nice fit I think.

Fitting the seating ring and bearing is easy with a press. There is a little bit of room between the bearing and the seating ring. I'm not sure if that is supposed to be there, but I do not want to push too hard with the press on the bearing.