

# Mon 2013.06.10 LL

We took off both the differential and wheel axles today in preparation of our new sprockets and chains.

The largest sprocket on the differential for the wheels was a challenge to remove. We didn't want to directly hammer the sprocket and gears to avoid damaging the teeth on them. Thus, we tried everything from wedging wood in between to sandpapering the sides. After much maneuvering, we were able to get all the parts off.

I hope to clean out the dirtied insides and grease/oil the chains and gears some more before assembly tomorrow.

I read further on the physics of rowing. There's quite a lot of resources out there.

Specifically, I was confused by the center of mass/gravity vs center of buoyancy and the metacenter as mentioned in <http://www.atm.ox.ac.uk/rowing/physics/basics.html#fig61>. I'll look more into other articles on this topic. I think this is an important concept to understand, because if we make the argument that the center of mass stays the same on an erg on slides, we'll need to show how our erg models the movement of the COM for rowing on water.