

## [ABU 10000CL](#)

« on: April 14, 2010, 02:33:06 PM »

[Quote from: BigT on March 19, 2010, 04:34:02 AM](#)

Here's my other recent project... hope this one is up to the expectations of Alan and members too.

Ok... so here's a little job for a fishing mate of mine who, because their slovenly nature will become apparently shortly, will remain nameless to protect the guilty.

First, the schematics...

<http://www.mikesreelrepair.com/schematics/displayimage.php?album=27&pos=21>

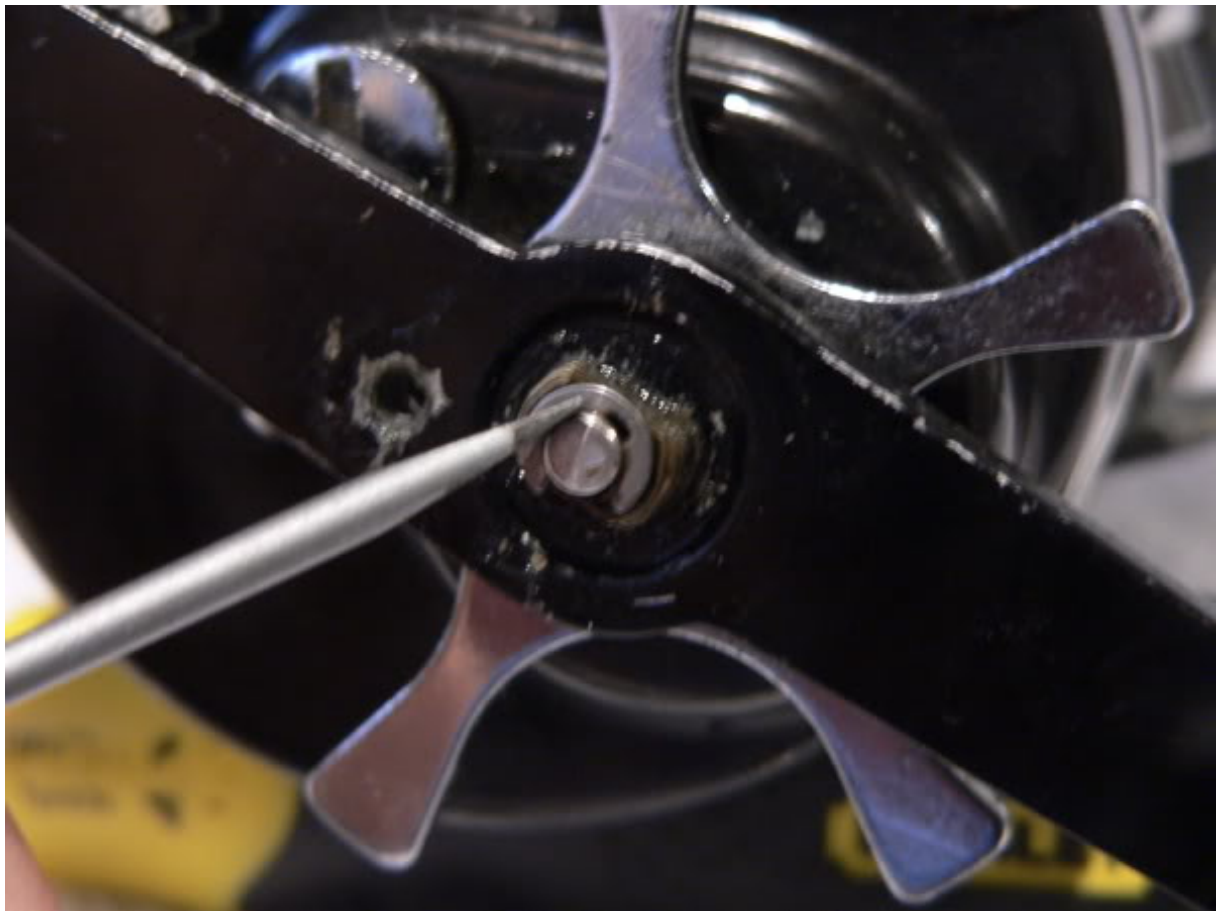
So, I was handed this reel with a sad-eyed and hopeful look. For some reason, it didn't seem to be working as well as it did when it was made in the early 90's. So let's crack open this ABU 10000CL and see what the problem is.



The first thing to do is remove the handle assembly. Back out the handle nut locking screw (ref #8907). Then the handle nut collar (ref #4581) slips off. Here's the first problem... the thread in the handle for the screw has been badly damaged by corrosion. We'll have to sort that out later.



Next the handle nut (ref #6968) can be removed. There's an 'e' clip to remove carefully before the handle can come off.



Now... it was at about this time that I made my first phone call to my fishing buddy to tell him what I thought of his maintenance regime. 🙄

I spent about 10 minutes trying to remove the handle, gazing at the schematic while scratching my head, then trying again. It finally dawned on me that the handle didn't have some hidden retaining



mechanism... it was just corroded solid. Finally, when finesse failed me, brute force did the trick...



revealing this...

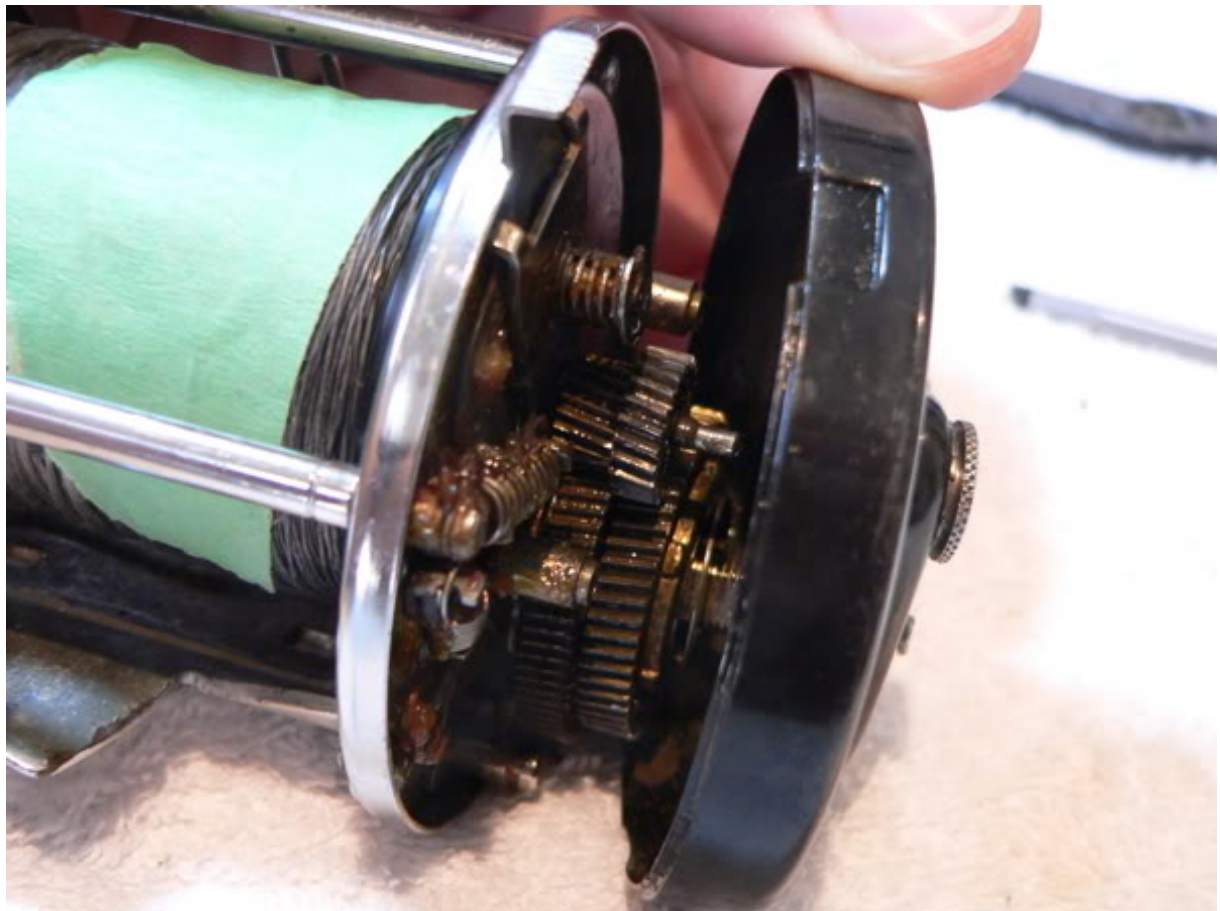


A couple of belleville washers need to come off (ref #9751 & #9376) followed by unscrewing the drag

star (ref #9696)



Now the 2 screws securing the right side-plate can be removed and the side plate will slip off.



My friend's house-keeping wasn't much better in here... 'just adding more lube' only works to a point 😊





Let's start cleaning up... slip off the spacing sleeve/shield assembly and pull it apart for cleaning.





Having 2 speed gearing, there are 2 drive gears. The smaller 'low gear' drive gear slips easily off the drive shaft.





Remove the drag washers... the metal washers are stacked... and there's a washer beneath the gear too





Now, to get at the larger, high speed drive gear, you'll need to partially dismantle the clutch. Begin by removing the yoke spring retainer (ref #8845), yoke spring (ref #9741) and thrust washer (ref # not shown on schematic)







Next, detach and remove the 2 clutch slider springs (ref #9715 & 4055)... carefully so that they don't fly into the never-never.







With a bit of careful manipulation, the yoke should now lift off allowing you to remove the pinion gear (ref #9737).





The remaining drive gear and drive shaft can now be lifted off and dismantled. Hopefully yours won't look quite as bad as this one. I don't think the ABU engineers would like seeing their drag systems swimming in gunge & oil like this.







If you've ever heard anyone talking about drag washers getting 'compressed' this is what it can look like...



And the same with the washer beneath the drive gear (that bit that looks like torn metal is actually the drag clicker).



We won't be using the drag washers again so into the bin they go... funny, my friend didn't seem too fazed by the drag giving in 'lumps'... just another litre or 2 of oil and the problem seemed to fade... for a while. 😊



Now we can disassemble the rest of the clutch... This particular 10000CL uses a special composite lubricant that is 30% grease, 10% oil, 20% salt water and 40% river mud (the reel literally spent days in a river when it flooded their house and only the outside was cleaned)... pretty, isn't it?



Remove the clutch cam (ref #9713) and slider (ref #9710)





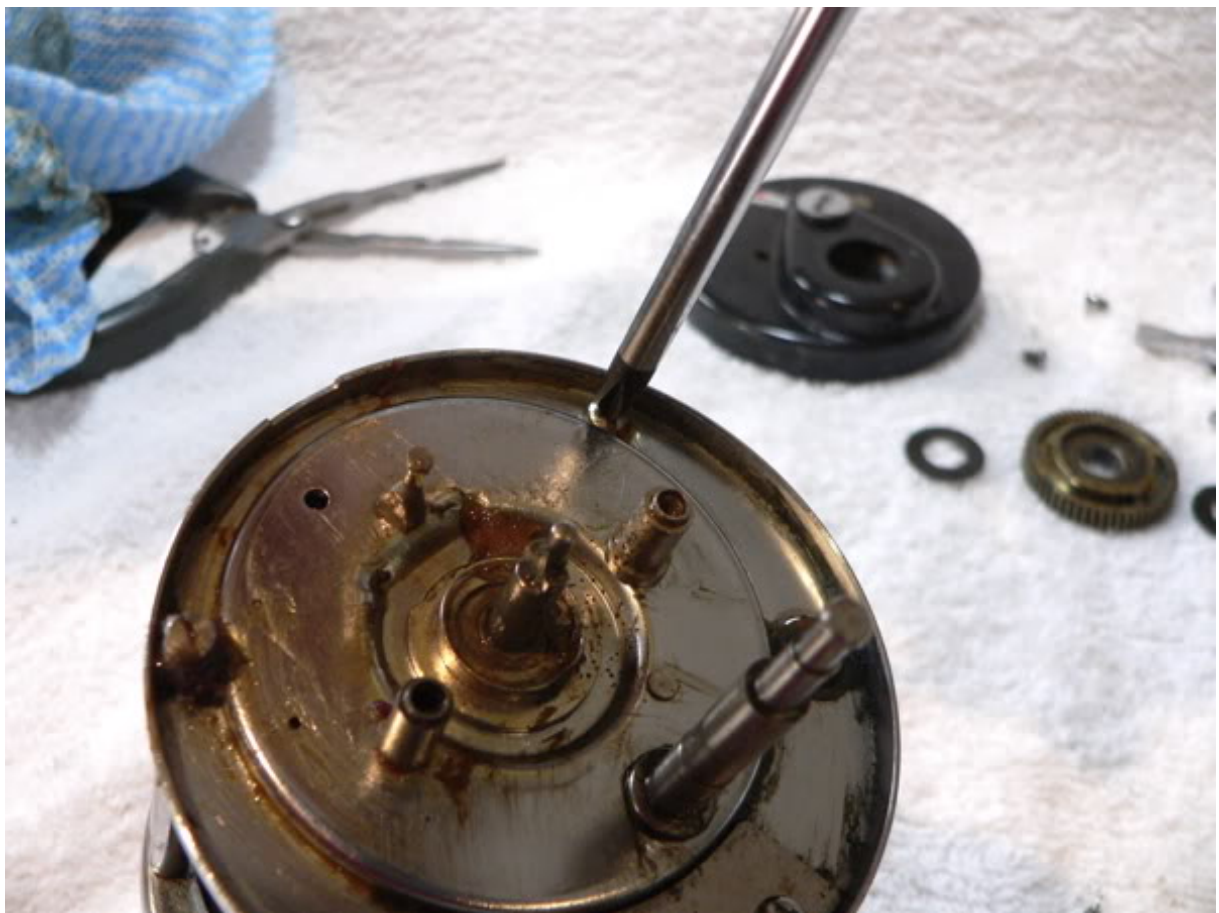


and while you're at it, put aside the anti-reverse dog (ref #8948)



Remove the worst of your river mud (or the old grease, depending on your reel) then back out all the screws securing the right side mounting plate (ref #15018)... there are 6 screw in total, holding all the

various support bars, reel seat and line guide assembly.











Now you can lift off the right mounting plate.



Take out the 'C' clip (ref #8816) securing the right bearing (ref #8940) and the bearing should just slip out.







Not surprisingly, the bearing really belongs in the knackery so a quick measure (5 x 13 x 4mm) and a new one is on order.



After a thorough clean-up the mounting plate gets a fresh coat of grease... and in this case, the cleaned and re-lubed bearing can go back in temporarily until the replacement arrives.



Put the right mounting plate aside and lets move on to the left side.

The 3 screws (ref #15033) securing the cross-member (ref #8829), line guide cross member (ref #15023) and real seat (ref #8934) can be undone and the parts put aside.





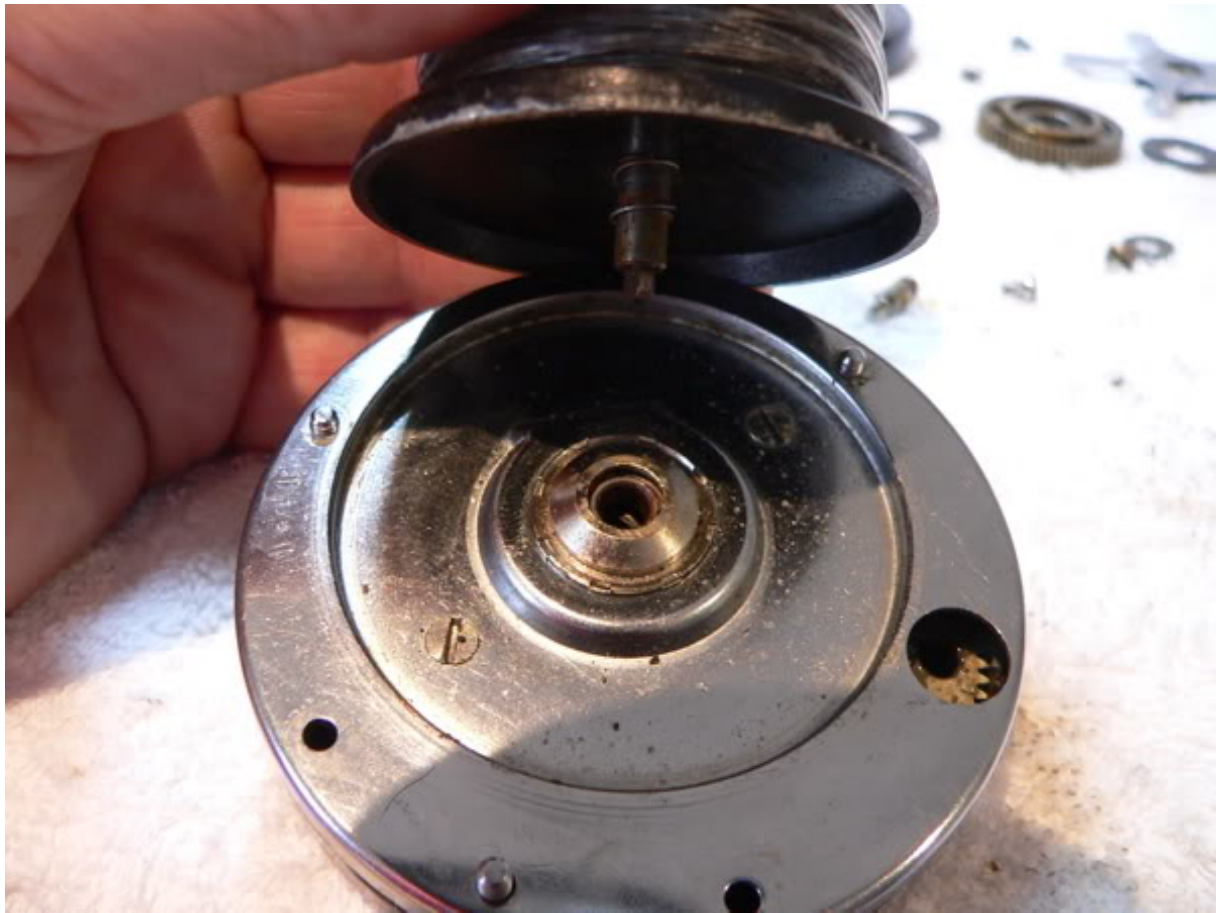


The worm shaft and line guide assembly will just slip out...



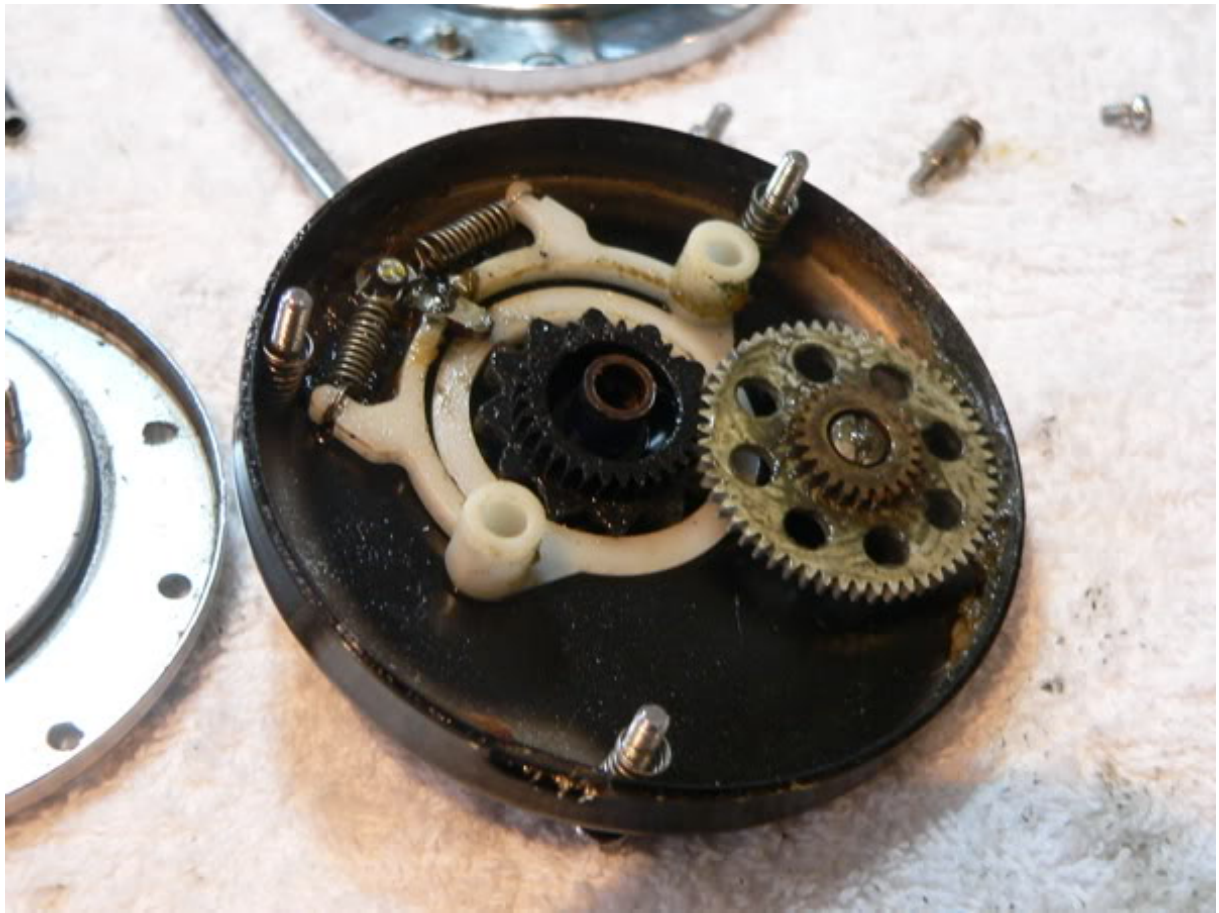
And the spool (ref #970248) can be slipped (or when there's a bit of rust involved like here... manhandled) from the left side assembly. Don't lose the spool spring (ref #4111)





2 screws securing the left side plate (ref #15029) and mounting plate (ref #15015) can now be accessed. Back them out and the plates separate.





Lets go through the same process with the left side bearing and mounting plate (which in this case will also involve junking the bearing when the replacement arrives)







The left side plate is in much need of attention so remove the idler gear (ref #15010)



Now, slip out the centrifugal brake asseblly... careful of the brake blocks on the pins on the underside.







To remove the ratchet assembly, first detach the ratchet springs (ref #9773) from the clicker button (ref #8900).





Then the nylon clicker spring (ref #15014), the clicker (ref #8899) and the clicker button can be removed.







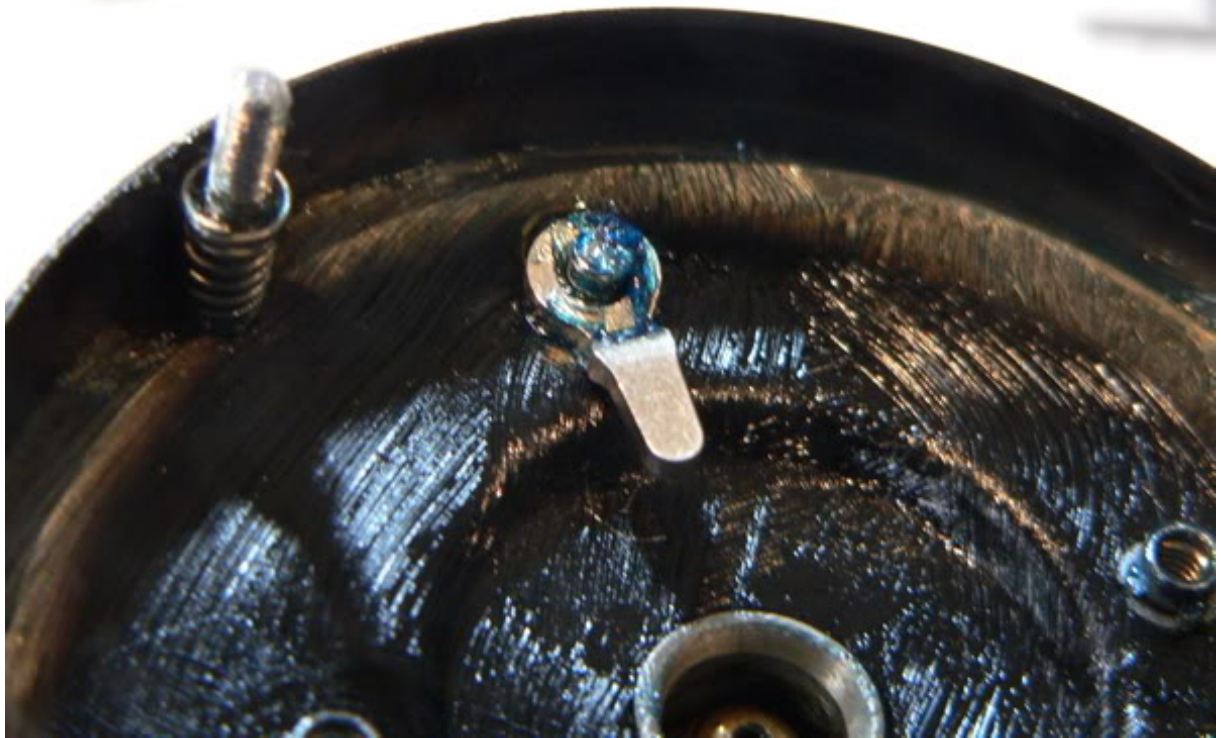
Clean up the inside of the left side plate and brush on a thin smear of fresh grease to protect everything.



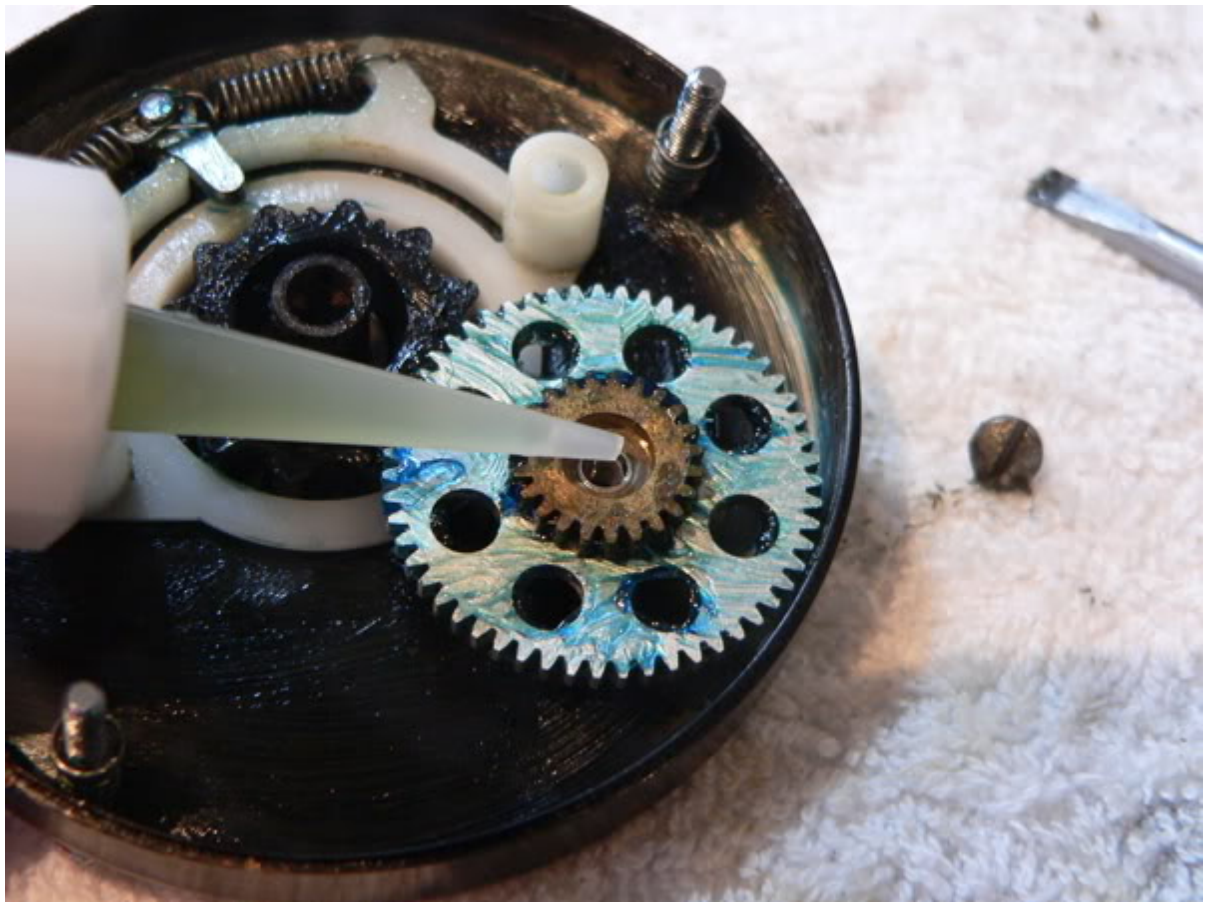
Then clean up, re-grease and reassemble the ratchet.







Give the idler gear a coat of grease, add some oil to the mounting point and pop the screw back in.







Then reattach the mounting plate and side plates...



Time to give some attention to the poor, neglected levelwind assembly, starting by cleaning the gunk out of the line guide 'guide shaft' (ref #15023)



Take apart the line guide assembly beginning with unscrewing the pawl cover (ref #5177).



Next, remove the pawl itself (ref #5176)... ummmmmm, they're usually supposed to be lubricated rather than packed with semi-solid gunk. 🤔  
The worm shaft (ref #15934 in this model version) will then slip out of the worm shaft cover (ref #15932 in this model version).





Give all the components a good clean with white spirit... pipe cleaners and Q Tips are a great accessory at this stage (that pipe cleaner started out white at the other end of the worm screw cover by the way).



Then give all the components, including the worm screw a thin coat of oil. Add a drop of oil to the bushings at each end of the shaft and the pawl as you're reassembling the levelwind.













Reattach the line guide shaft adding a small dab of grease to the screw hole first, then slip the levelwind assembly back into place, making sure that the line guide is seated properly in the grooved guide shaft.



Now, reattach the remaining cross member and, after cleaning the spool shaft, replace the spool into

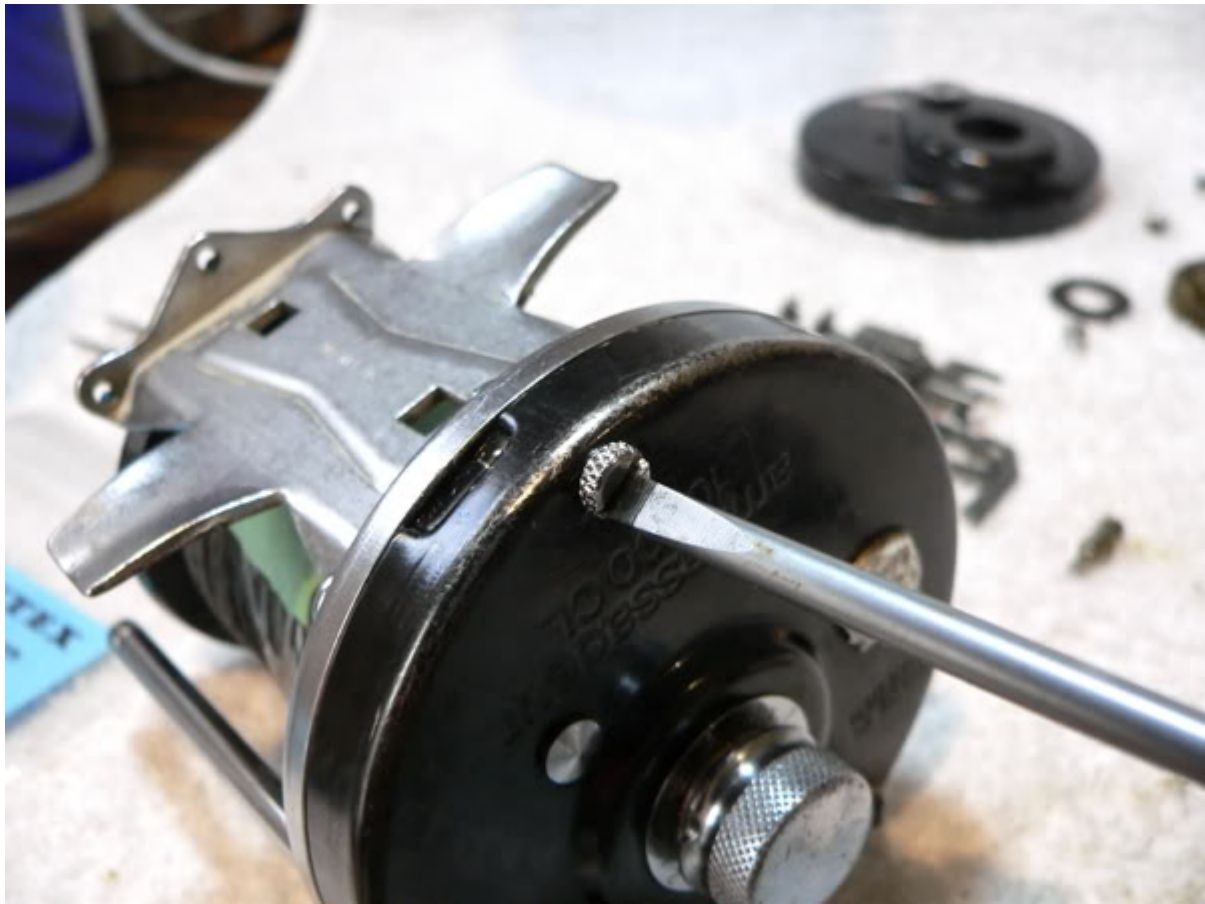
the left side assembly.



Smear the mounting plate of the reel seat with a little grease and reattach it to the left side assembly







Add a bead of grease to all the mounting screw holes and then reattach the right side mounting plate (you might notice in the photo that I've already reinstalled the small thrust washer (ref #9717)).





It's starting to look a lot better now...

Reassemble the main clutch components... the slider, clutch cam and pinion yoke.



Because I has some inkling as to the state the inside of this reel might be in, I'd pre-ordered a set of



Carbontex drag washers... just as well.

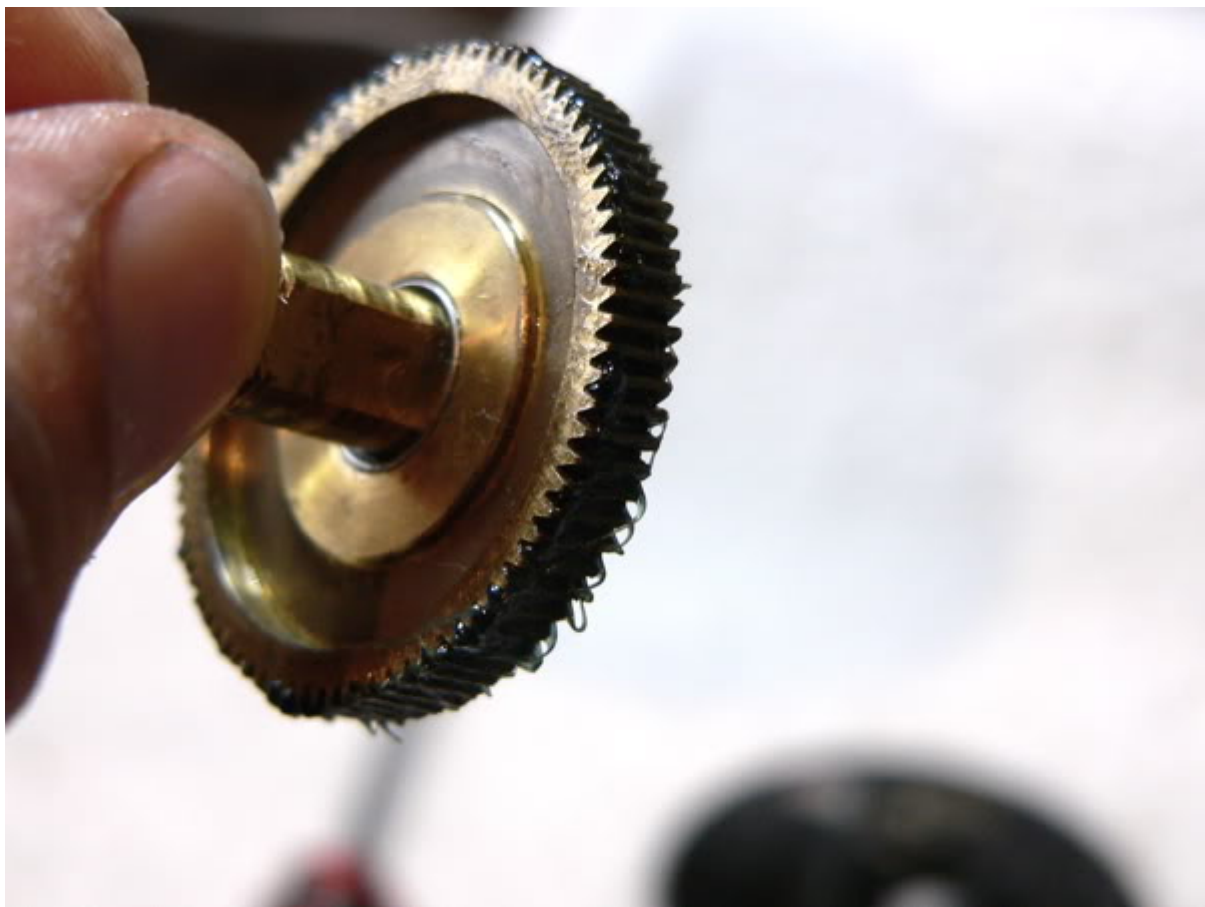


Give them and the drive gear drag recess a coat of drag grease before installing the new washers.

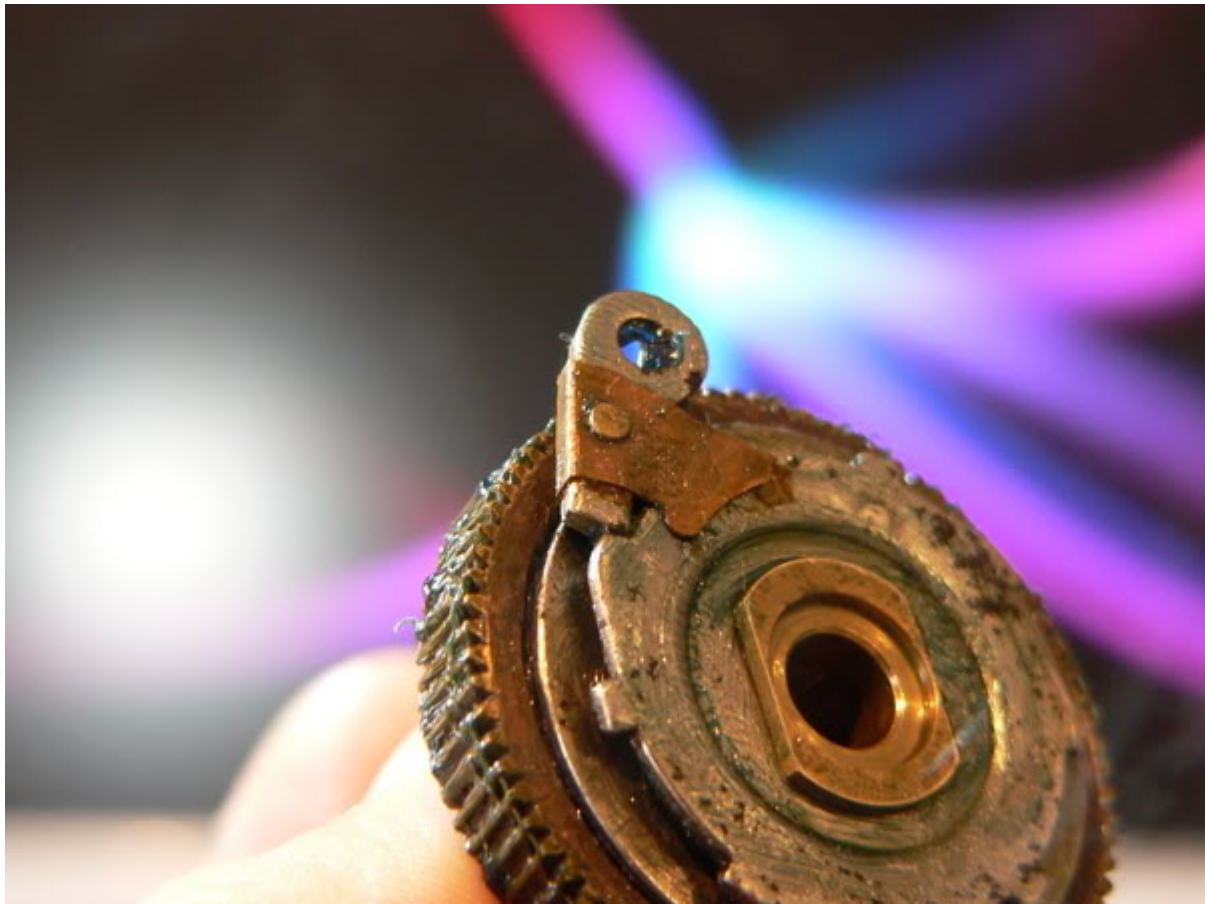




The drive gear teeth and the anti reverse gear & dog can all get a coat of blue grease.







do you like the funky photo background :1punk: ... that's the screen saver on my computer that I keep on with the schematics handy while I rebuild reels.

The high speed drive gear with rejuvenated drag can now be reinstalled on the right mounting plate.



A bit of jiggling and manipulating of the clutch components is needed to allow you to slip the greased pinion gear back into place.



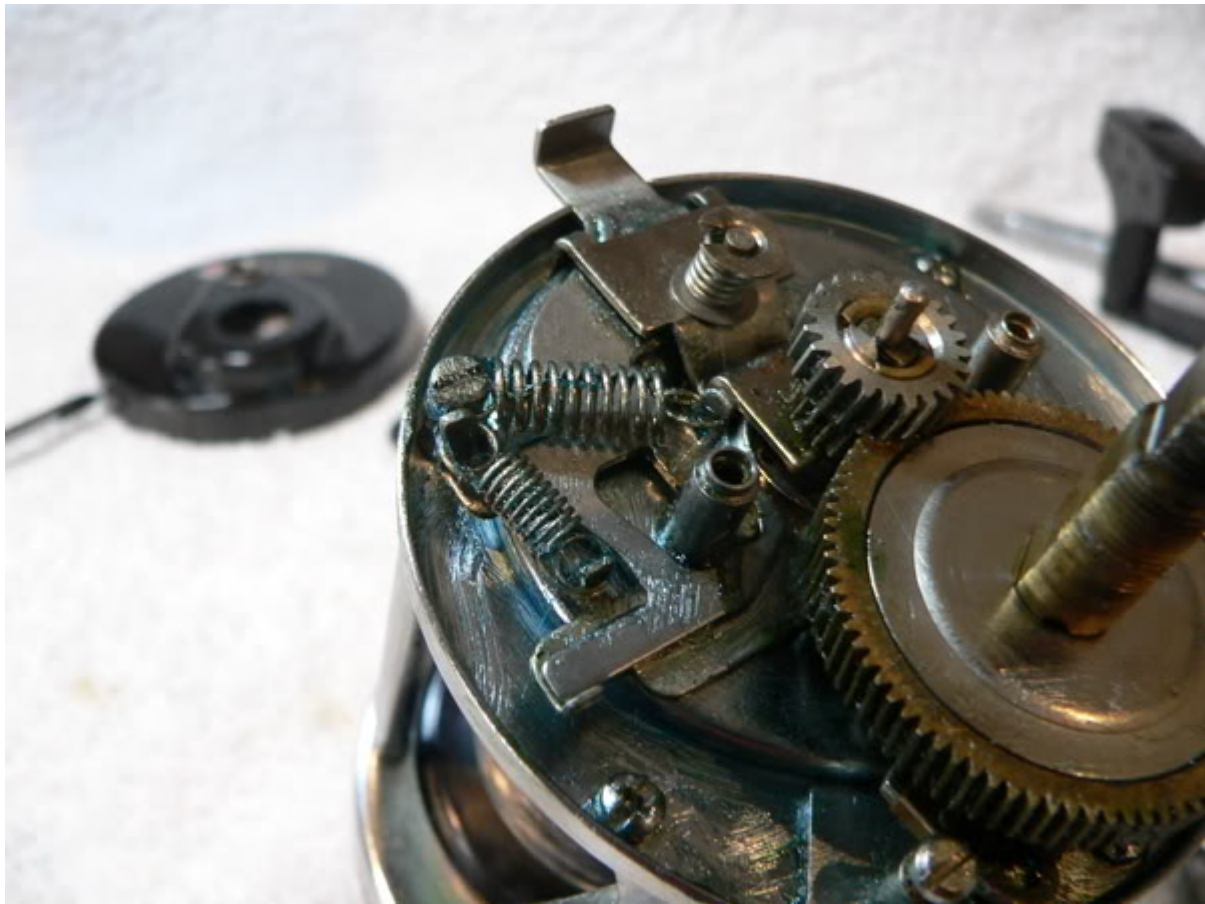
Reinstall the yoke spring and spring retainer



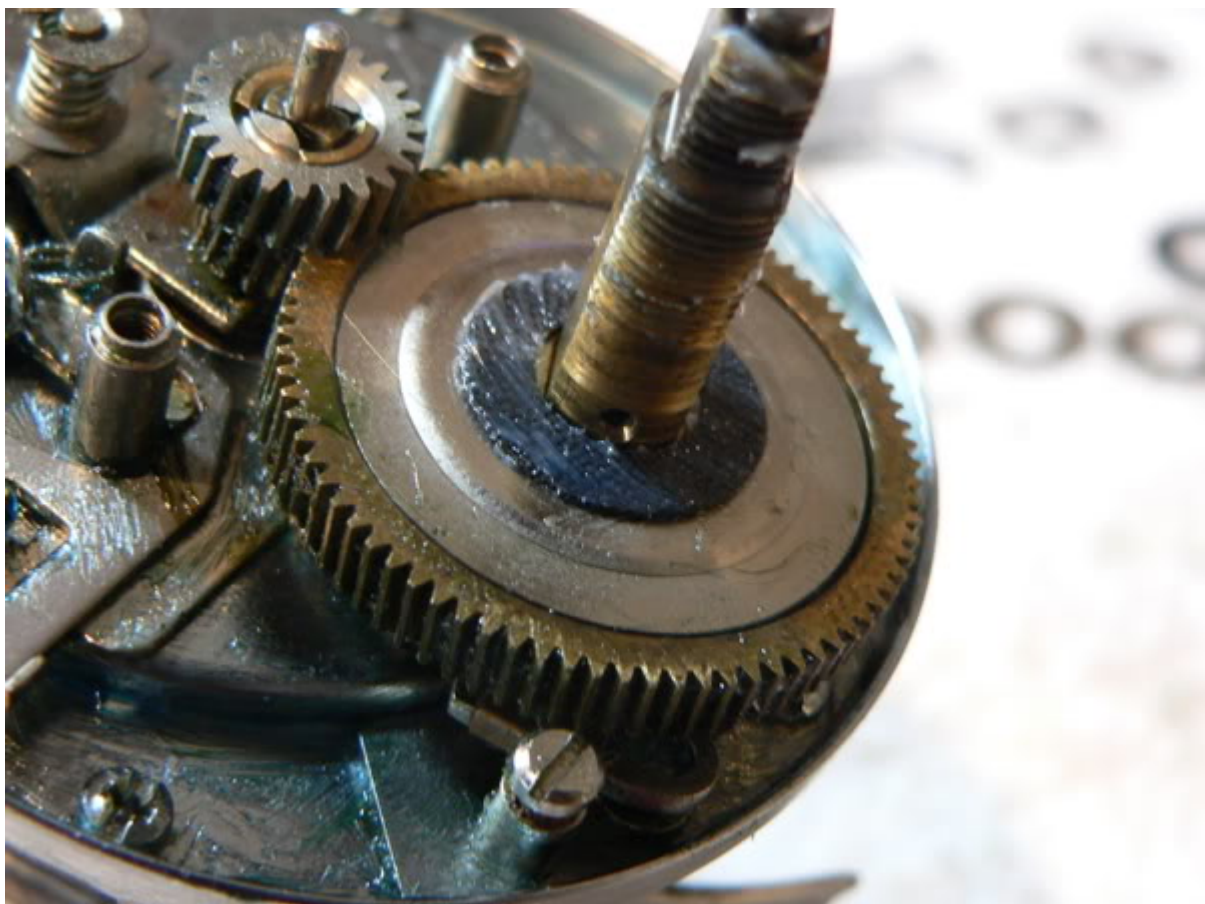


Then grease the clutch slider springs for protection and reinstall them.



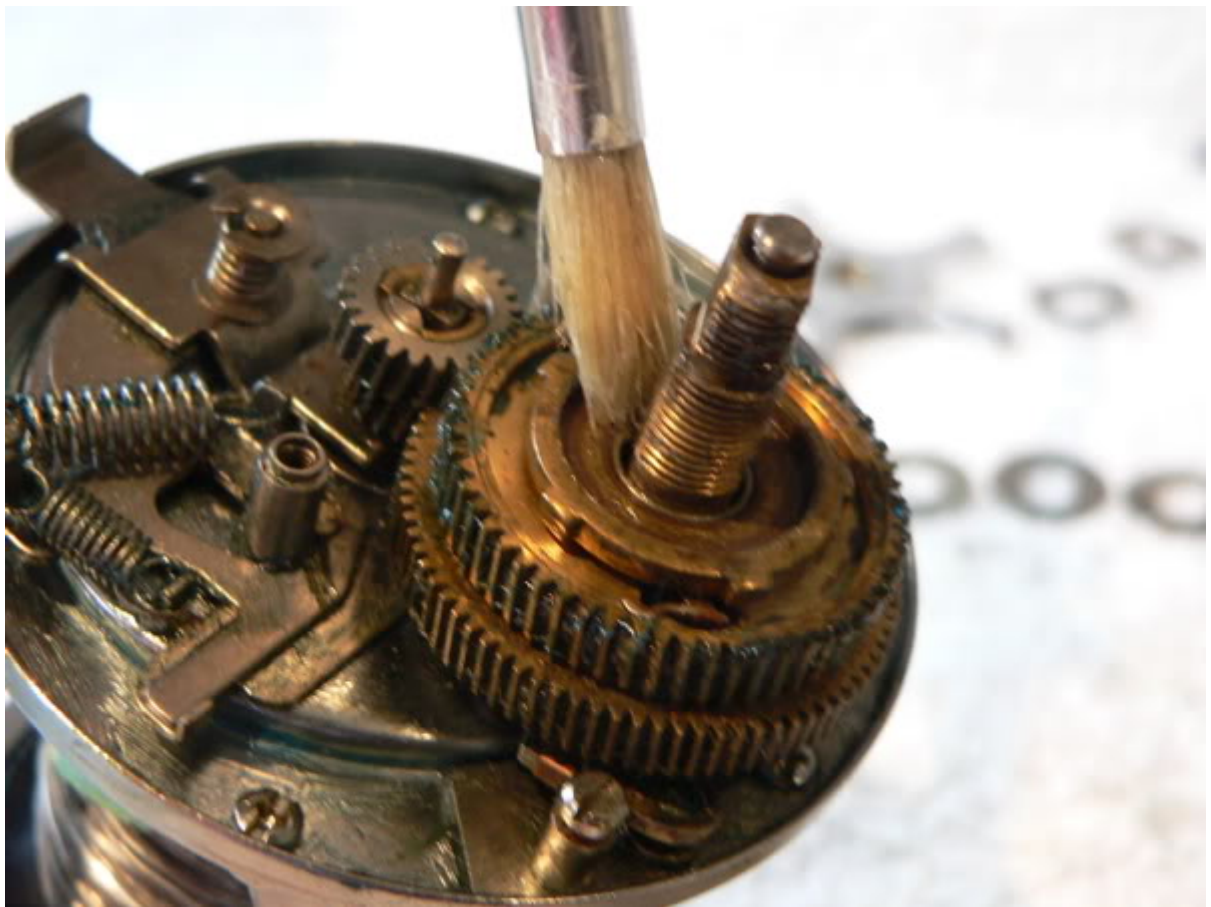
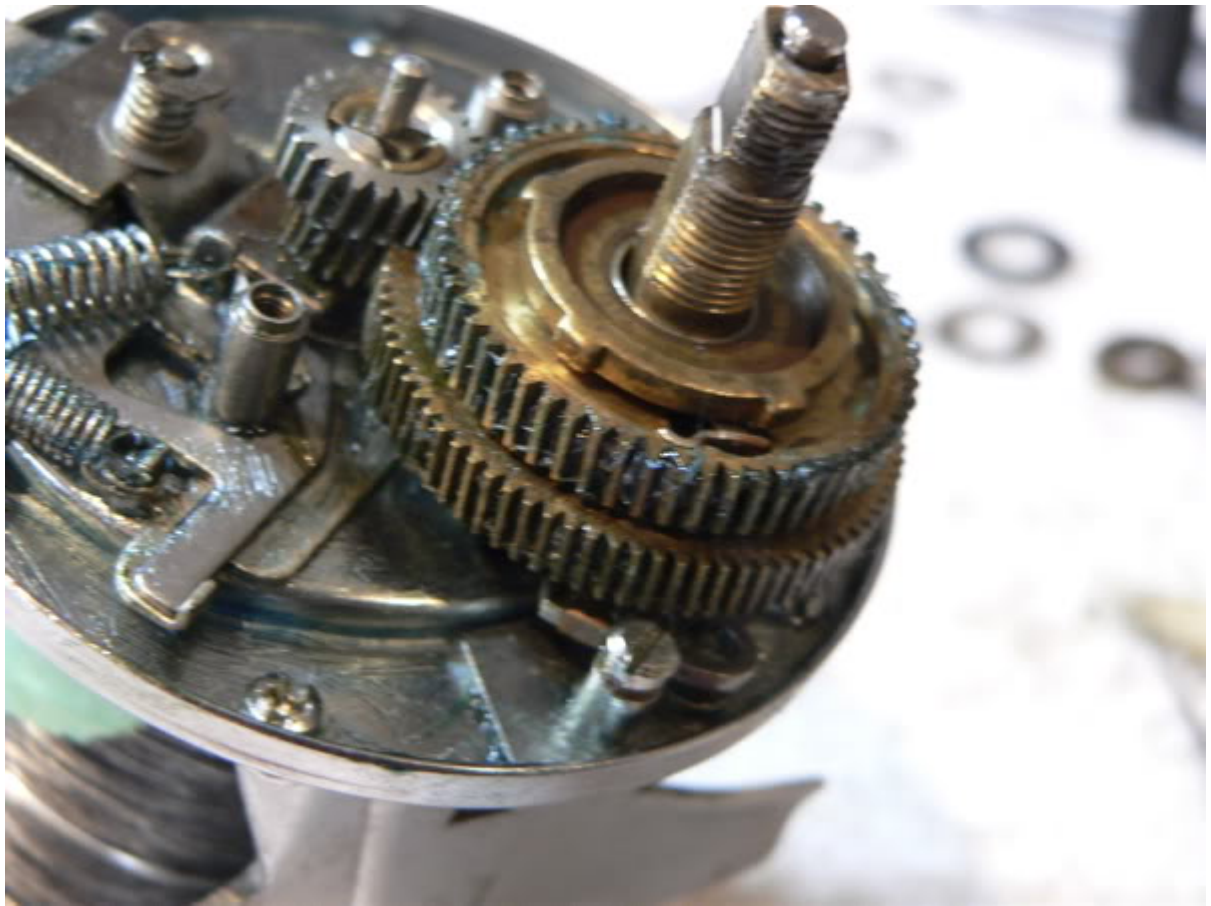


One of the Carbontex washers goes on next to separate the 2 drive gears, after a good coating of drag grease



Then the smaller 'low speed' drive gear can be greased and reinstalled followed by installing the remaining drag washers... greased Carbontex of course.







Clean out the spacer washer/seal components... including the o-ring (ref #8918, #9736 & #8868), give them a light coating of grease (drag grease might be advisable to avoid cross contaminating), reassemble and install.







Apply a light protective smear of grease using an old paintbrush or toothbrush to the inside surface of the right side plate.



Then the side plate can be reinstalled and screwed back on... note that the seal frame has a small tab that needs to be aligned with the notch in the side plate.



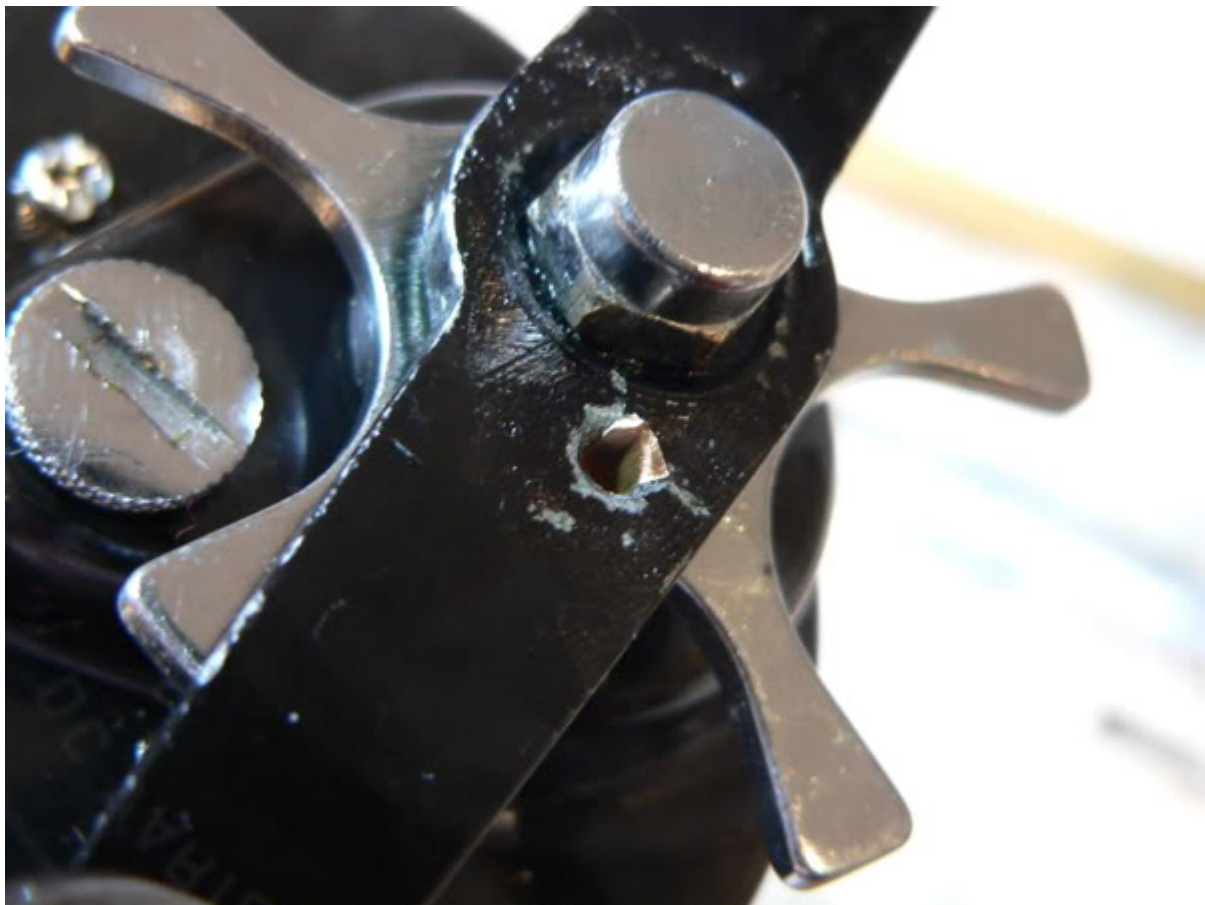


Giving each a smear of grease, return the drag star and the bellevilles.



Remember me saying the handle of this reel needed attention... give the handle a coat of grease front and back where it is mounted and reinstall it. And in the case of this reel I installed a soft copper shim in the corroded locking screw hole.





Reattach the e-clip handle nut, locking collar and the locking screw



And it's done (apart from having to dispose of the white spirit and river mud)



After all this, my mate's ABU 10000CL is like a different reel. When the new bearings arrive, I'll swap out the ones that are making the interesting gravelly noises and while it won't exactly look like it came out of the box, it should be back to performing like it.



Actually, this rebuild was a lot of fun. After also doing a 6500 and a 7000 straight afterwards, I'm wondering why I ever stopped using ABUs. These traditional reels may not be as flashy or have some of the gizmos of newer generation baitcasters in particular, but the engineering is simple and dependable. You have to spend a lot of money in other brands to get the same quality.

It's child's play stripping down one of these compared to the nightmarish complexity of the average mid-range spin reel these days.

Thanks once again to Alan and [www.fishraider.com.au](http://www.fishraider.com.au) for allowing me to post this tutorial.

Cheers, BigT