

Cabela's Depthmaster II Tutorial (DM30/DM45)

Part 5: Assembly of the Right Side

This is Part 5 of a 6 Part Tutorial on assembly and disassembly of Cabela's® Depthmaster™ II reels.

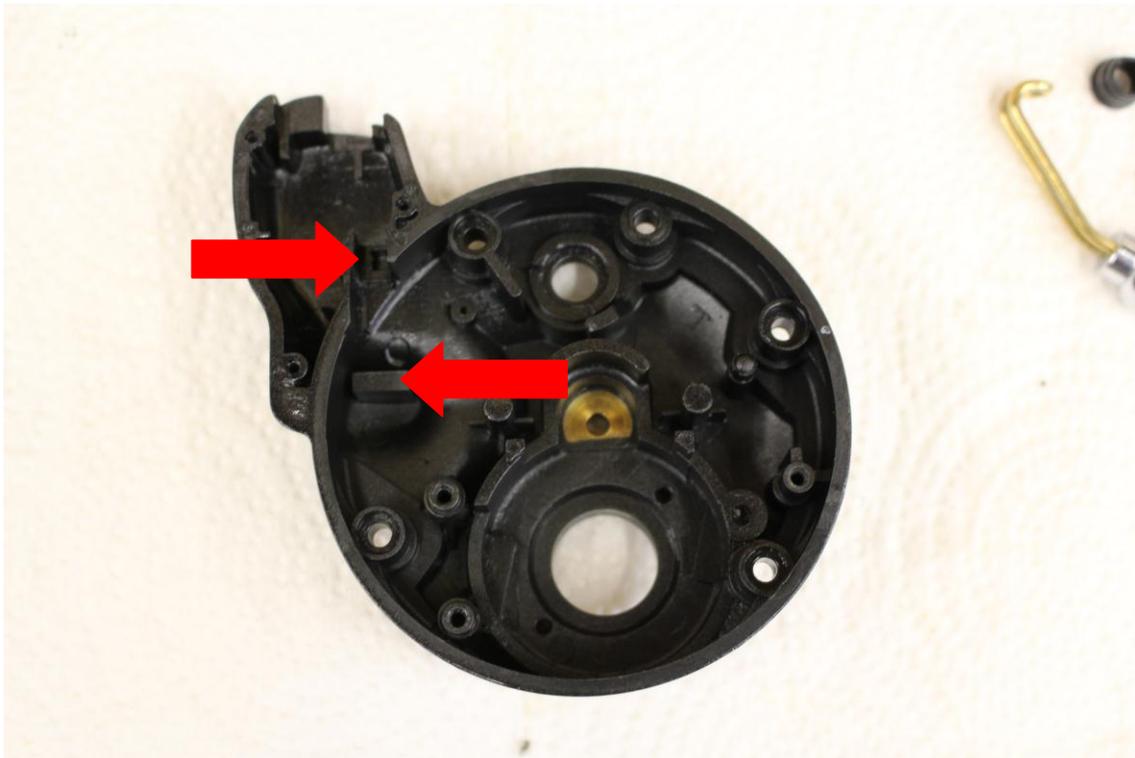
In Part 5 of the tutorial the Right Side Subassembly is assembled.

The DM30 and DM45 assembly and disassembly procedures are identical. The DM30a and DM45a are 98% the same (they are shipped from the factory with "Carbonite" carbon fiber drag washers.) The DM15, DM15a, DM20, and DM20a are 95% the same as the DM30 and DM45 reels.

Use this tutorial at your own risk - see the disclaimer on the last page of this document.

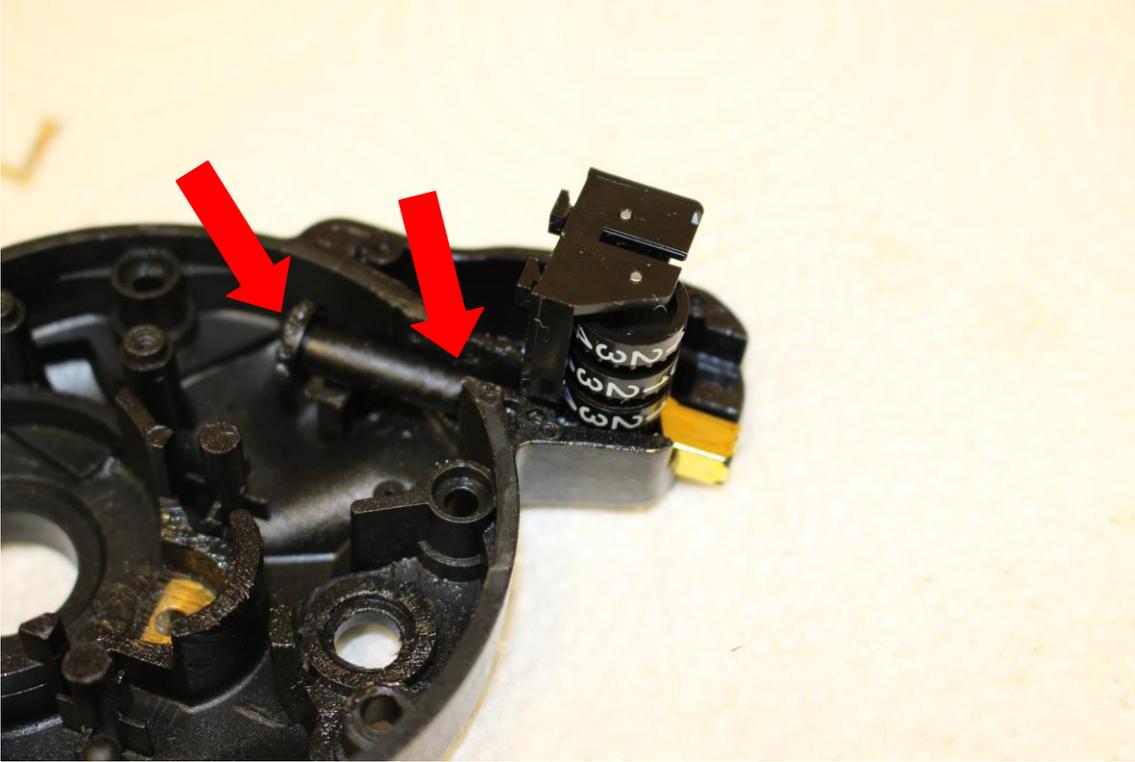
Lubricate the parts as you assemble the reel. Apply grease to all interior metal surfaces to protect them from corrosion. Apply grease to every location where parts rub together unless you are instructed to use oil instead. Many people use special oil on the spool bearings of casting reels. Line counter reels are not used for casting, so special oil is not required for the bearings (it is your choice). Carbon Fiber drag washers should be greased with Drag Grease. "Acid brushes" work great for applying grease.

Use your favorite reel lubricants. In this tutorial I am using Super Lube® Synthetic Grease, Break Free® CLP® oil, Abu Garcia® Silicote® Reel Lube (grease) for packing bearings, and Cal's Universal Reel & Star Drag Grease on the drag washers. I am fishing in fresh water and have observed no degradation of any of these lubricants after 5+ years of use in reels.

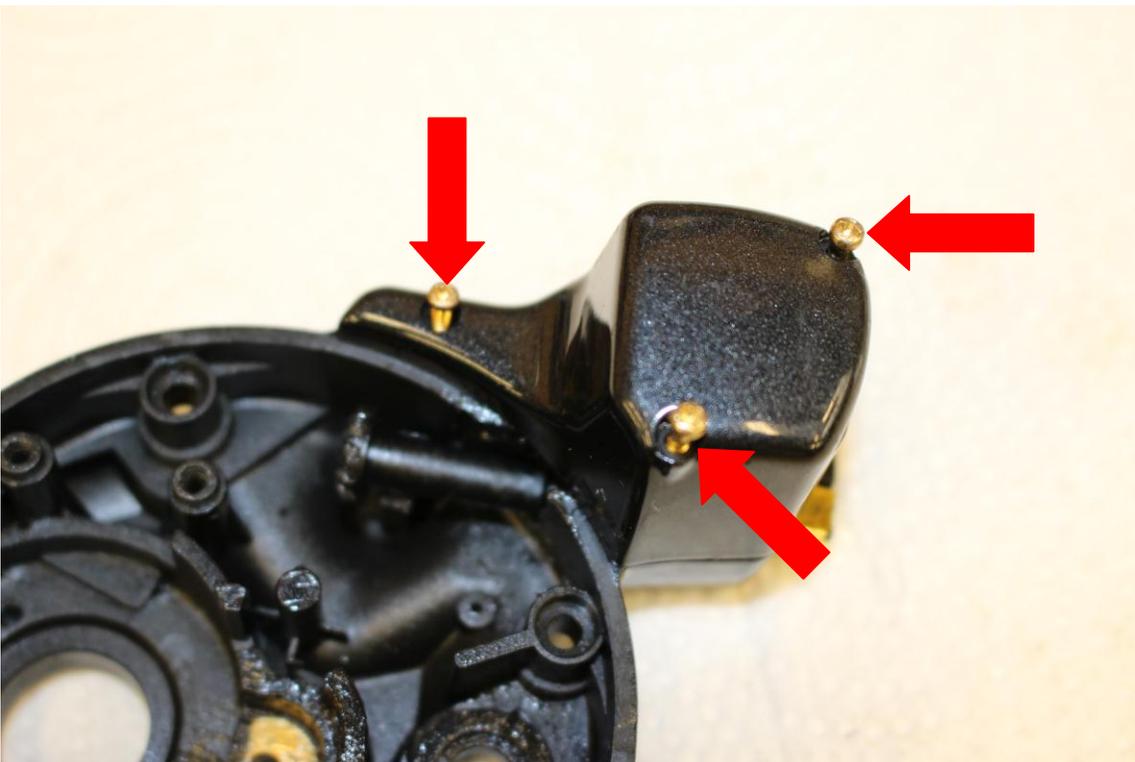


The inside of the Right Side Plate is shown here. Apply grease to the contact points for the Depth Counter subassembly (as indicated by Red arrows).

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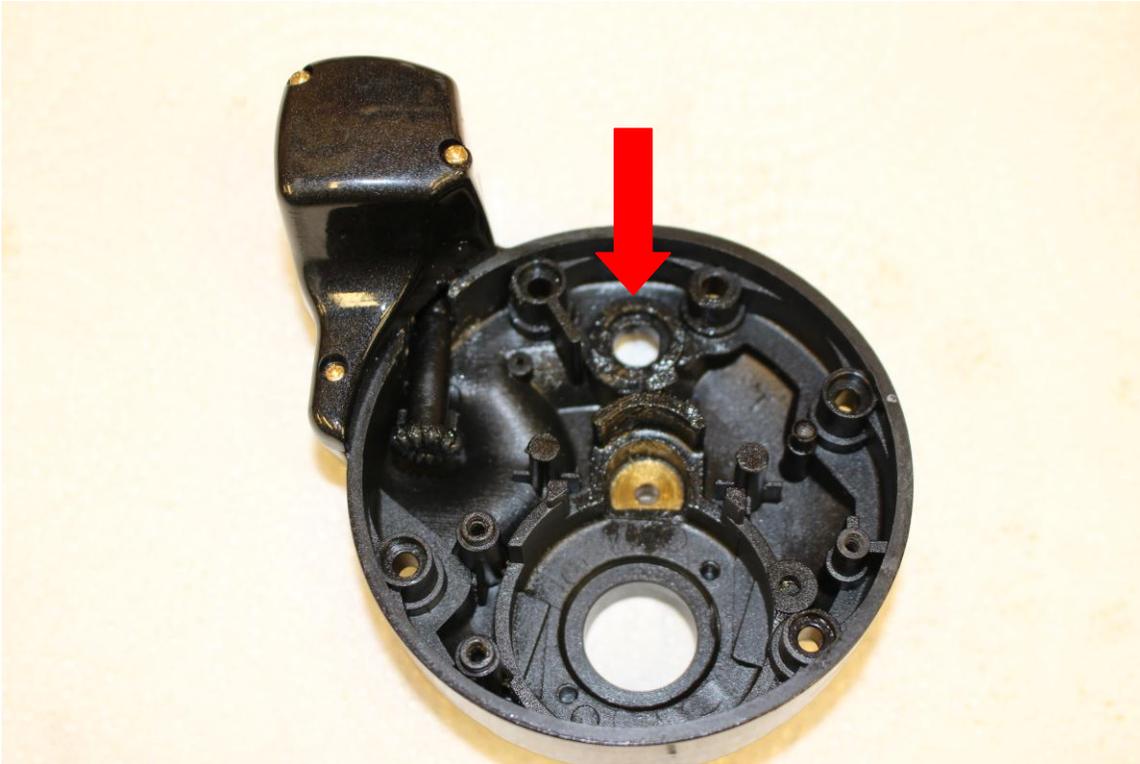


Apply grease to the gear at the end of the Depth Counter shaft and also to the portions of the shaft which may contact the side plate. Slide the Depth Counter subassembly into the side plate. Do not lubricate the Depth Counter subassembly.

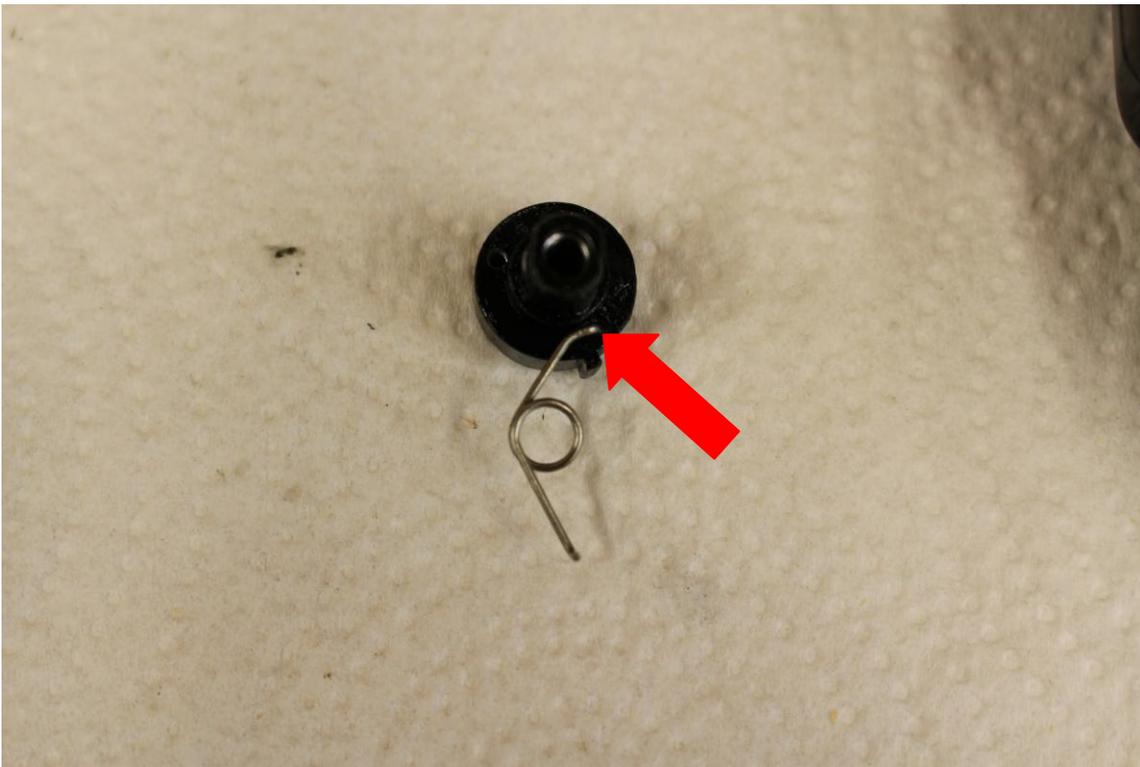


Install the Counter Cover Assembly and the three brass screws. Carefully tighten the screws.

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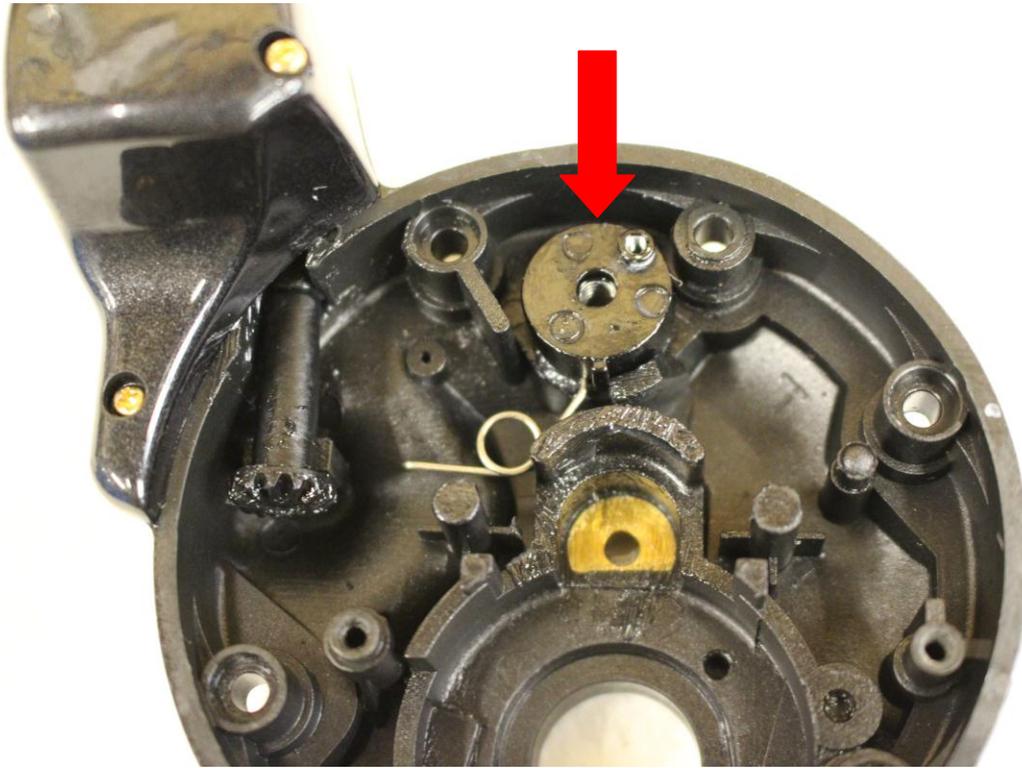


Grease the side plate where the Clutch Cam assembly will be installed.

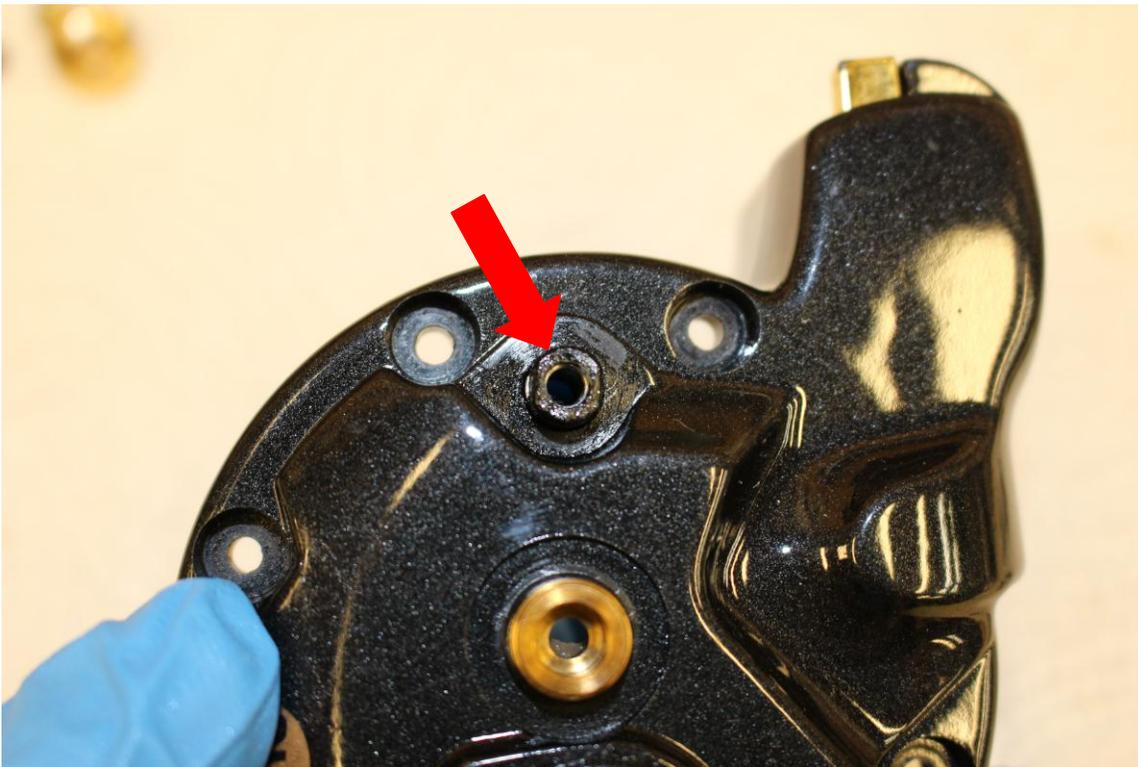


Insert the bent end of the Clutch Cam Spring into the hole in the Clutch Cam.

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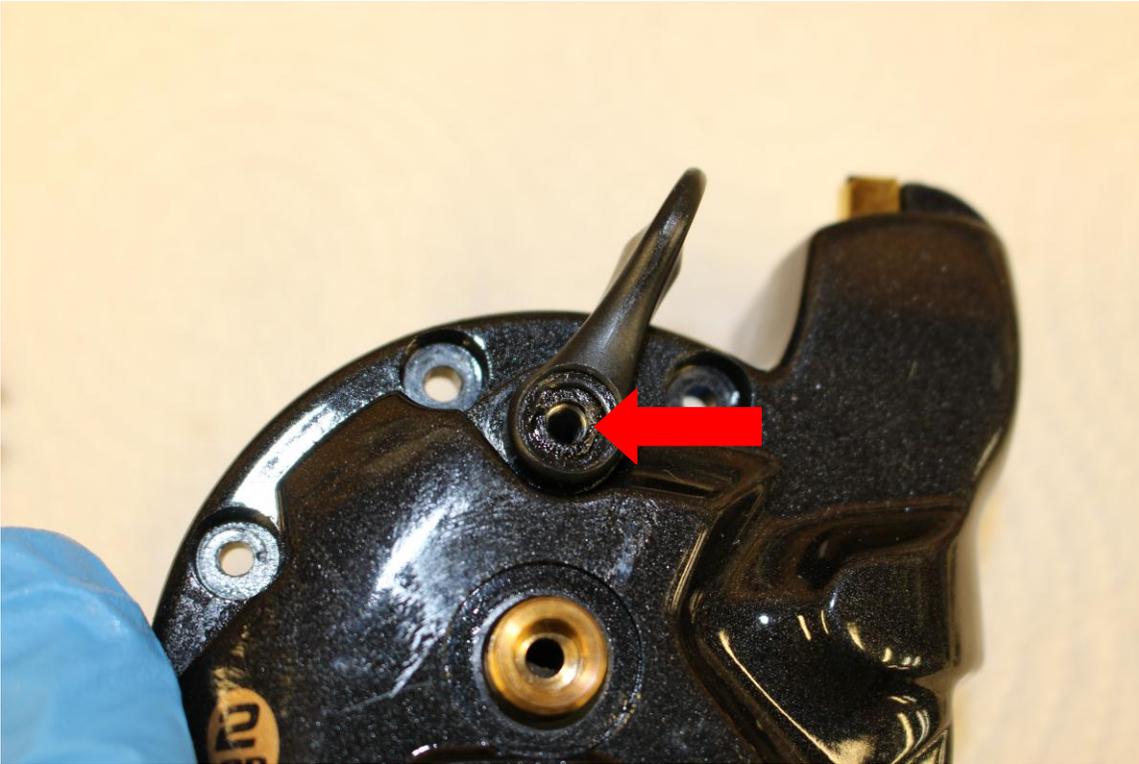


Insert the Clutch Cam with the Clutch Cam Spring installed into the hole in the side plate.



While holding the Clutch Cam in place with 1 finger, flip the side plate over and slide the Clutch Bar (Lever) onto the shaft of the Clutch Cam.

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Install the Clutch Bar (Lever) Screw and tighten it until it is snug.

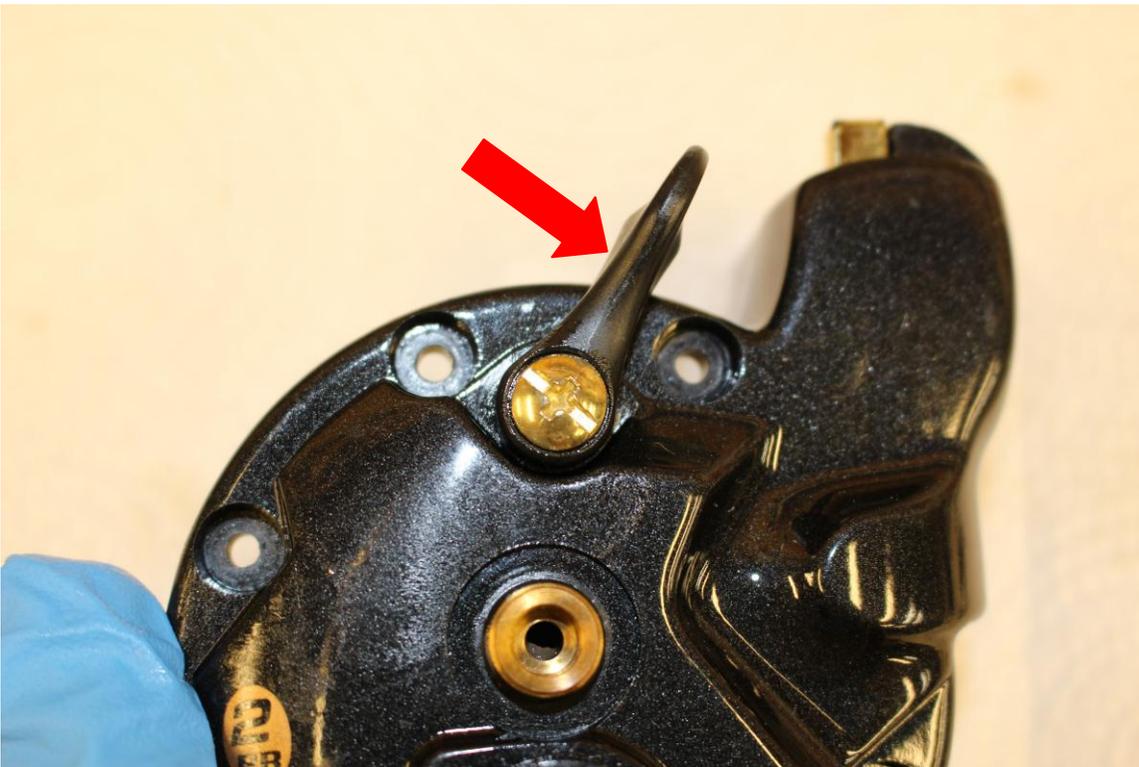
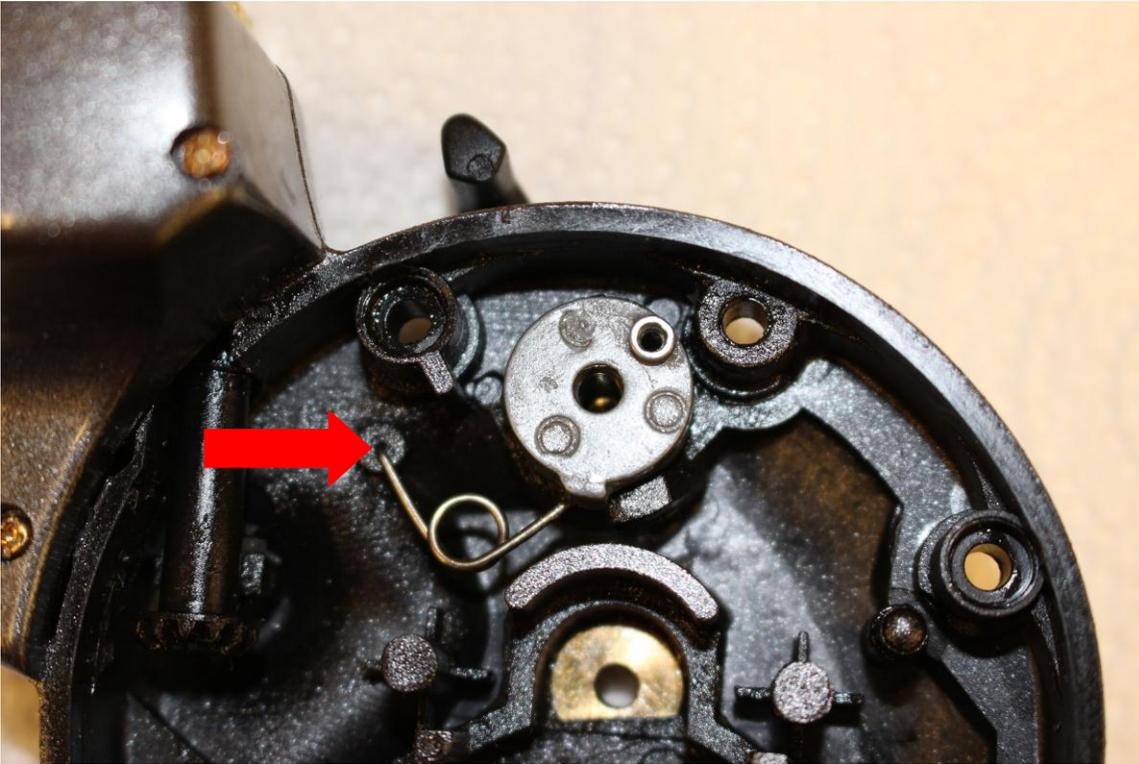


Photo showing the Clutch Bar (Lever) installed. Flip the side plate over.

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Grab the free end of the Clutch Cam Spring with a small needle nose pliers and insert it into the hole in the side plate. Move the Clutch Bar (Lever) to verify that the Clutch Bar moves freely.

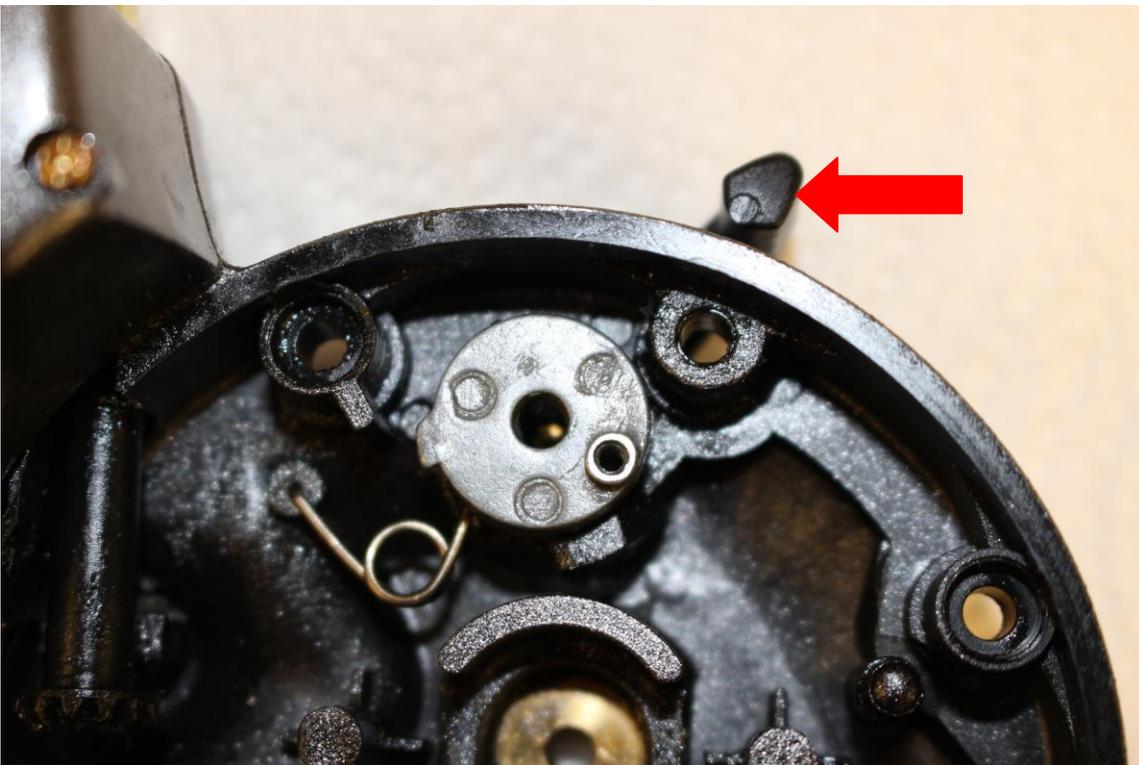
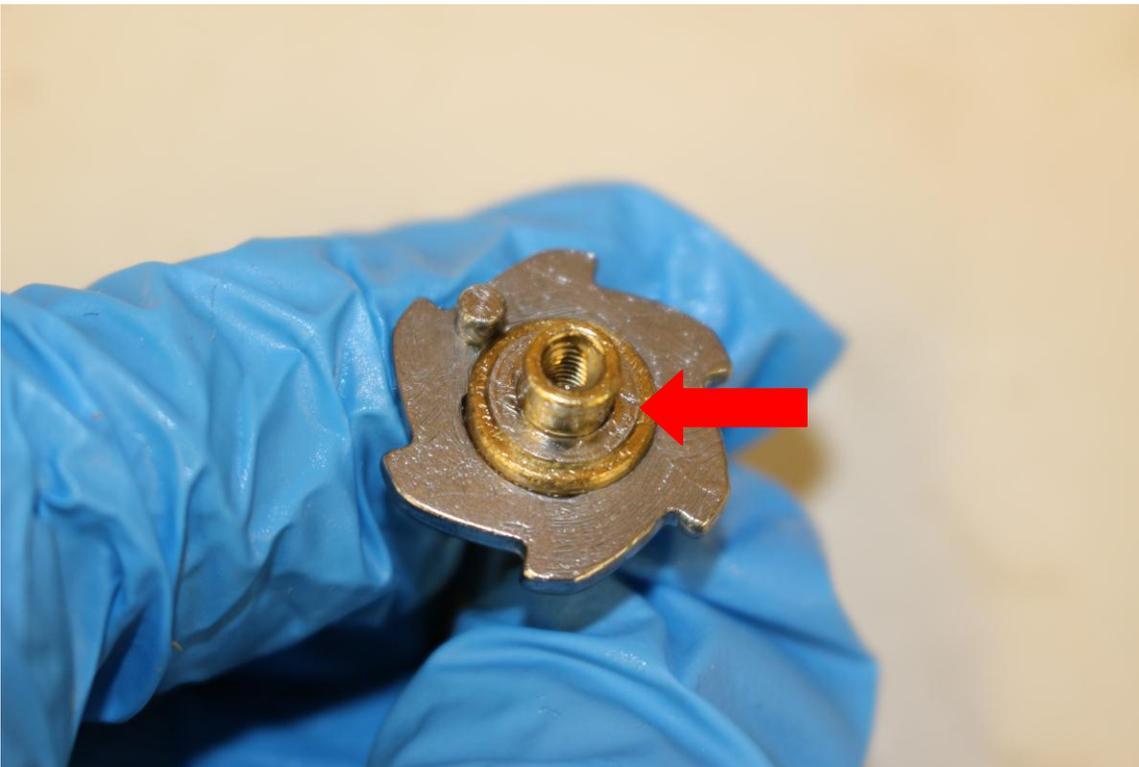


Photo showing the Clutch Bar (Lever) moved to the right, which rotates the Clutch Cam and compresses the Clutch Cam Spring. Move the Clutch Bar (Lever) to the left before continuing the assembly process.

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Grease the bottom of the Drive Shaft Assembly.



Install the Drive Gear Shaft washer on the bottom of the Drive Shaft Assembly.

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Grease the Drive Shaft Bushing and install it on the bottom of the Drive Shaft Assembly.

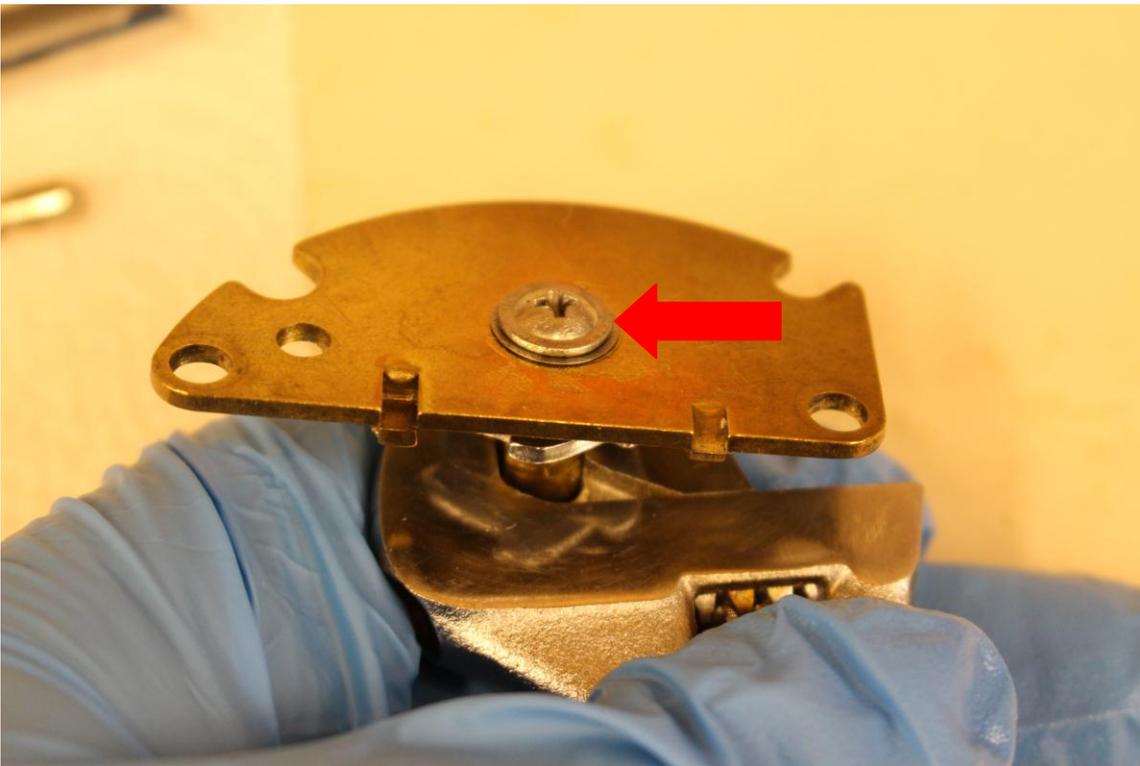


Grease the bottom surface of the Hold Plate and install it on the Drive Shaft Bushing.

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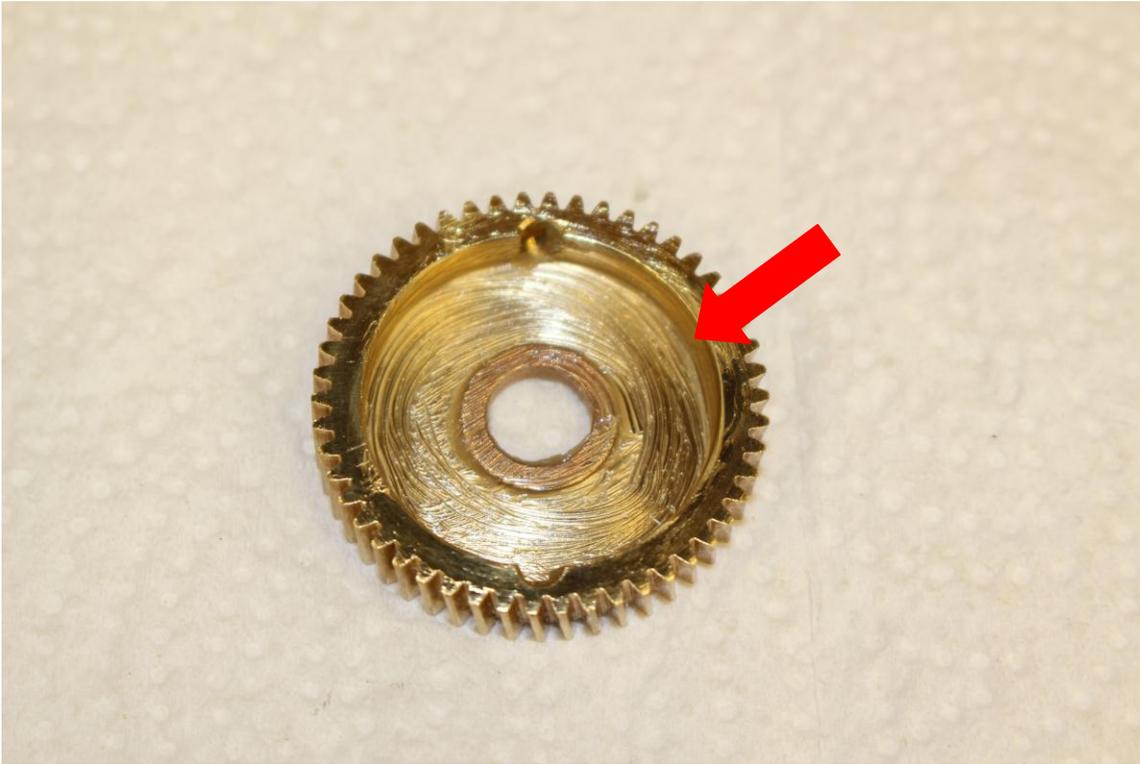


Grease and install the Washer and Drive Shaft Screw onto the Drive Shaft Assembly.

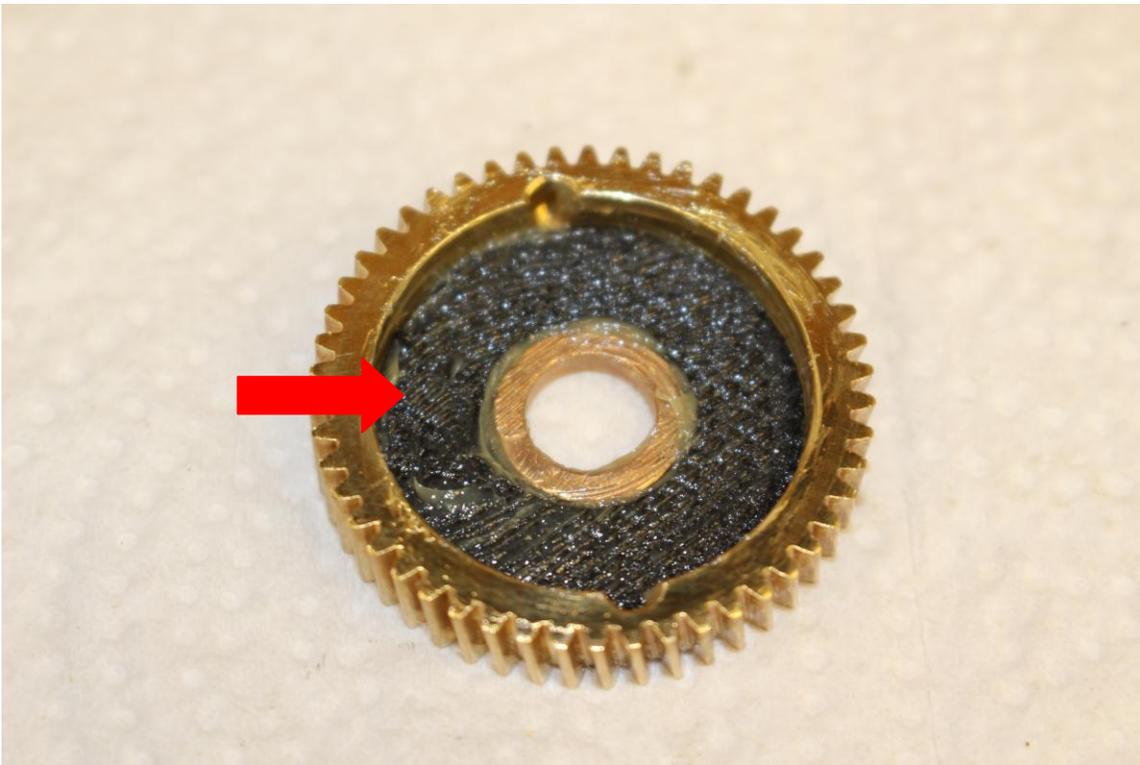


To install the Drive Shaft Screw use a wrench on the flats of the Drive Shaft and tighten the Drive Shaft Screw.

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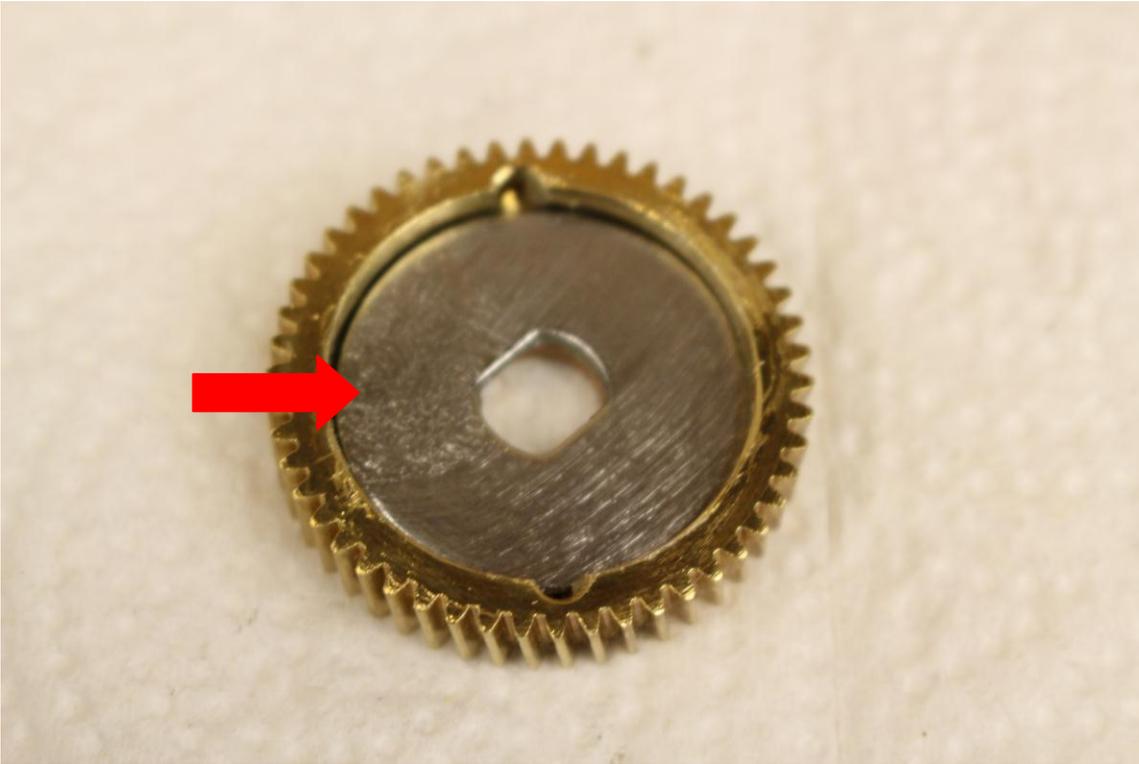


Grease the inside of the Drive Gear with drag grease. If you don't have drag grease you can run a carbon fiber drag without it (dry), but it won't be as smooth. Never use Super Lube on the drag components; it is too slippery and the drag will slip.

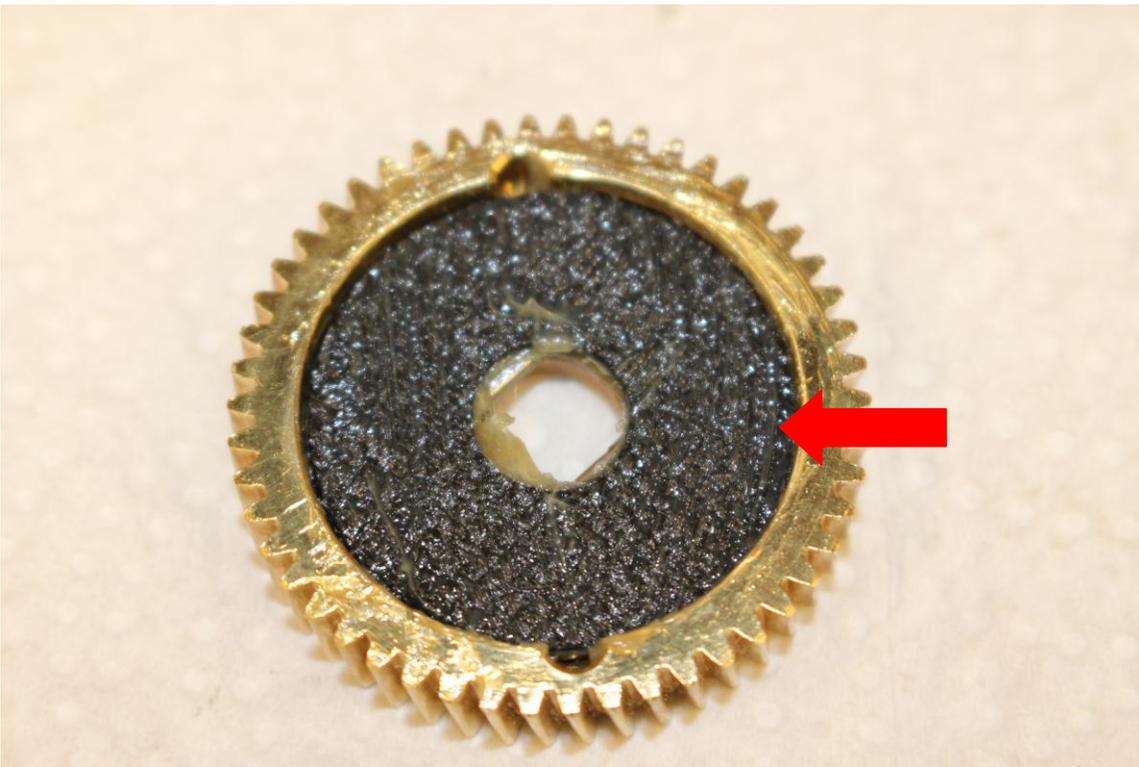


Coat the bottom carbon fiber Drag Washer with drag grease and insert it into the Drive Gear. If your reel does not have a carbon fiber drag washer upgrade, the assembly process is exactly the same.

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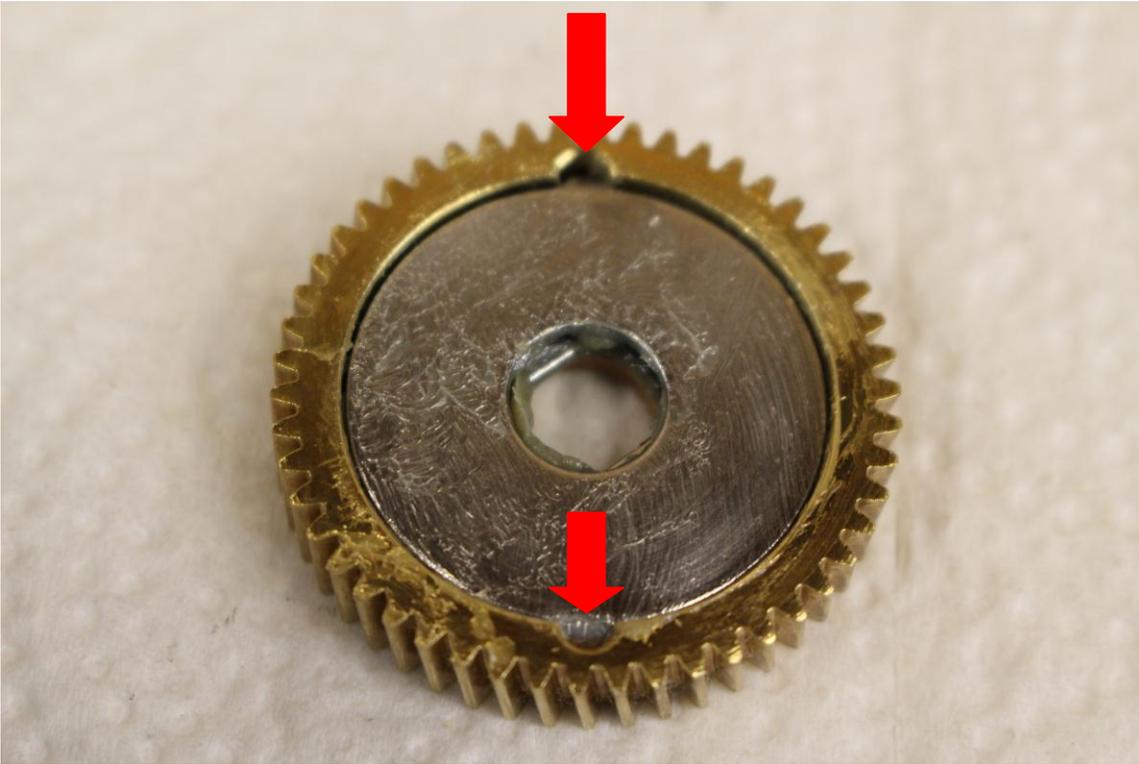


Coat the thin metal Drag Washer with drag grease and insert it into the Drive Gear.

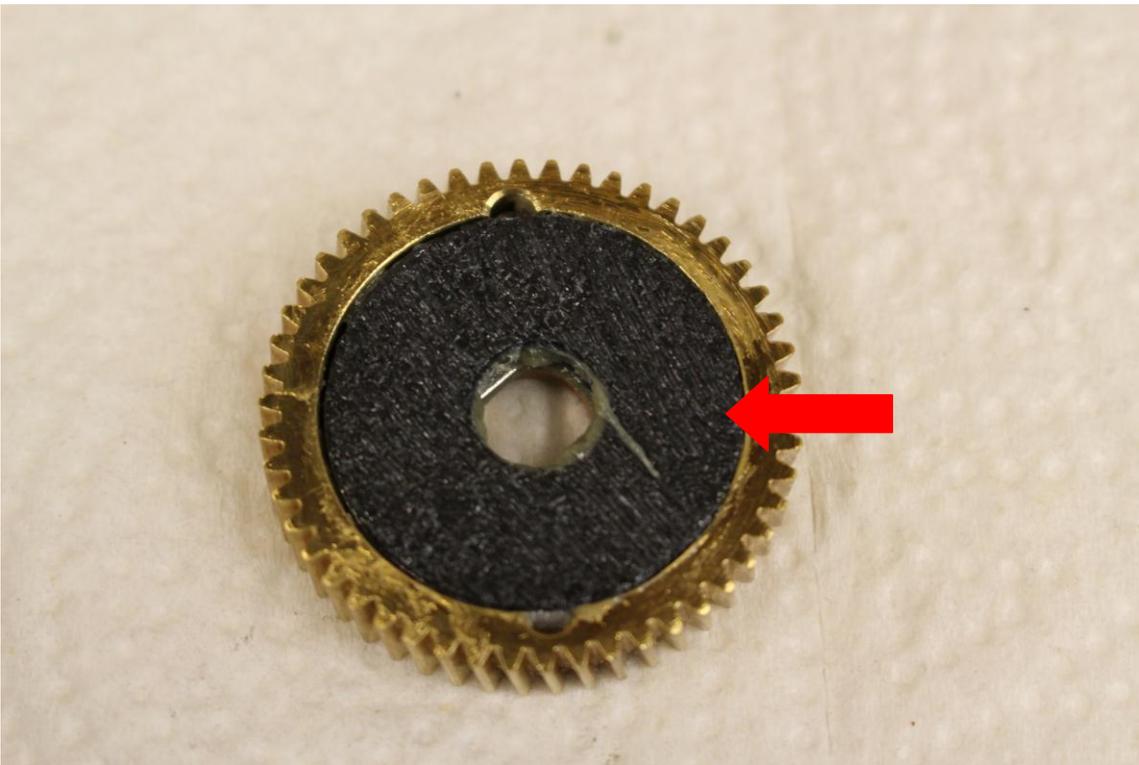


Coat the 2nd carbon fiber Drag Washer with drag grease and insert it into the Drive Gear. The 2nd and 3rd carbon fiber Drag Washers are identical.

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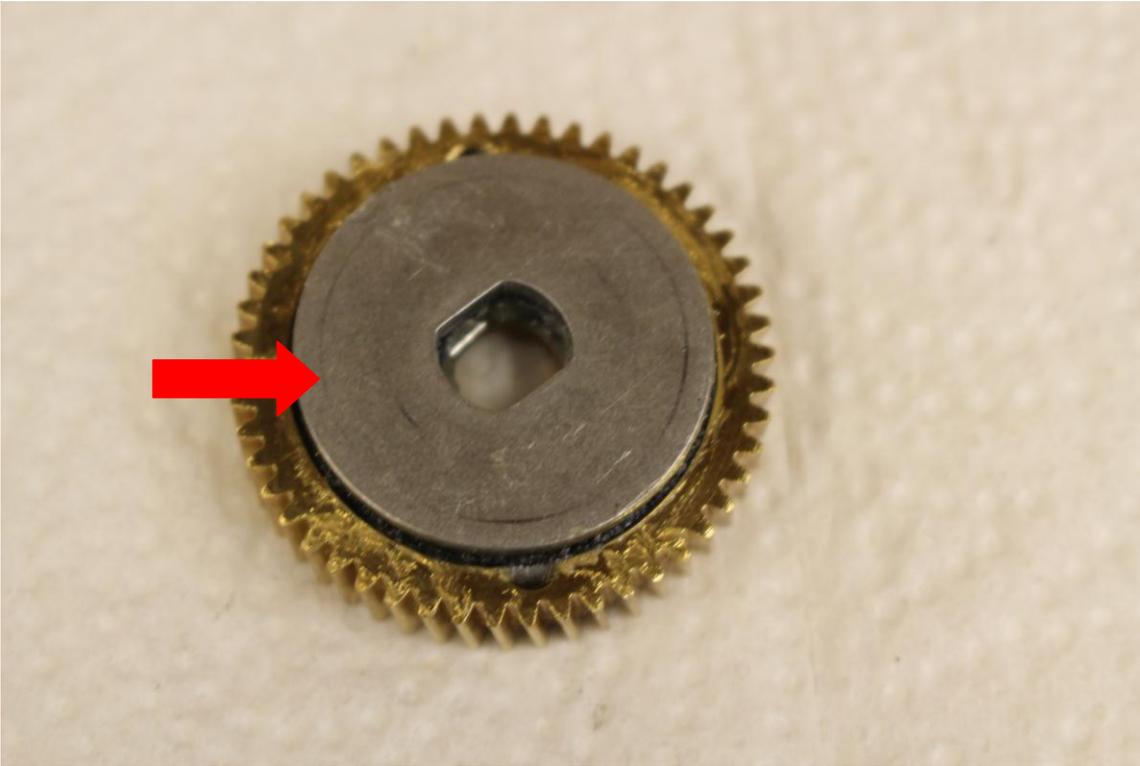


Coat the 2nd metal Drag Washer with drag grease and insert it into the Drive Gear with the bent ears down.

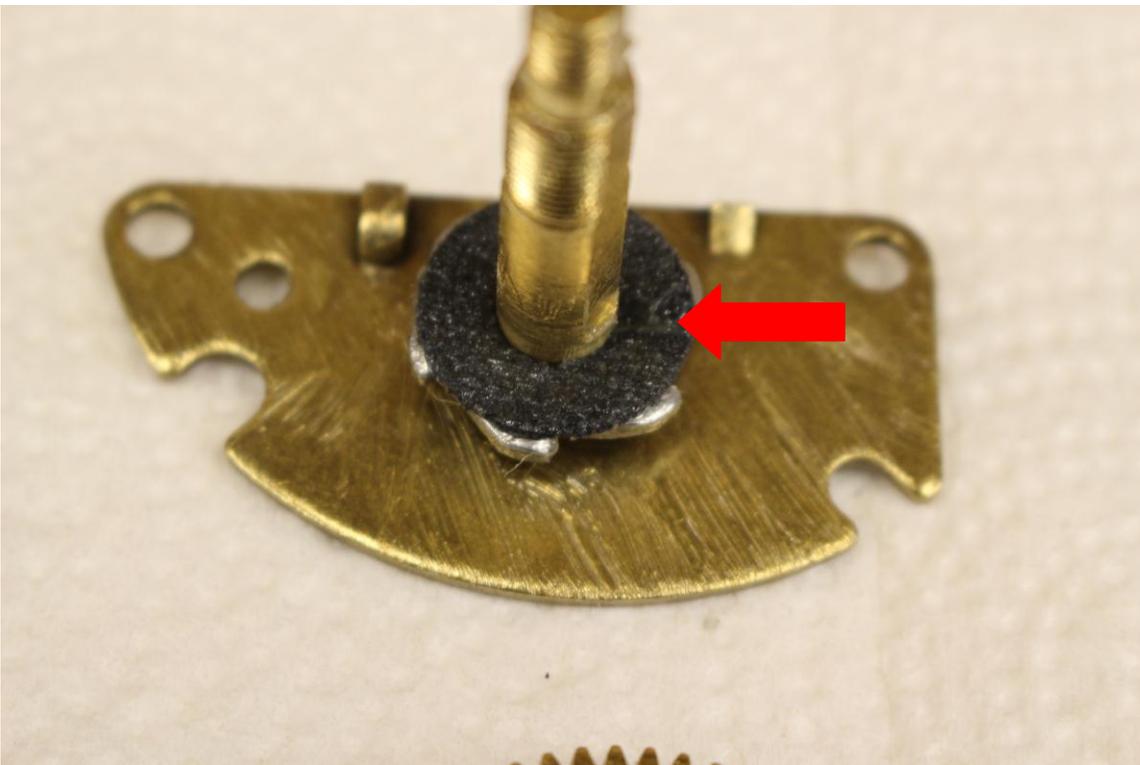


Coat the 3rd carbon fiber Drag Washer with drag grease and insert it into the Drive Gear. The 2nd and 3rd carbon fiber drag washers are identical.

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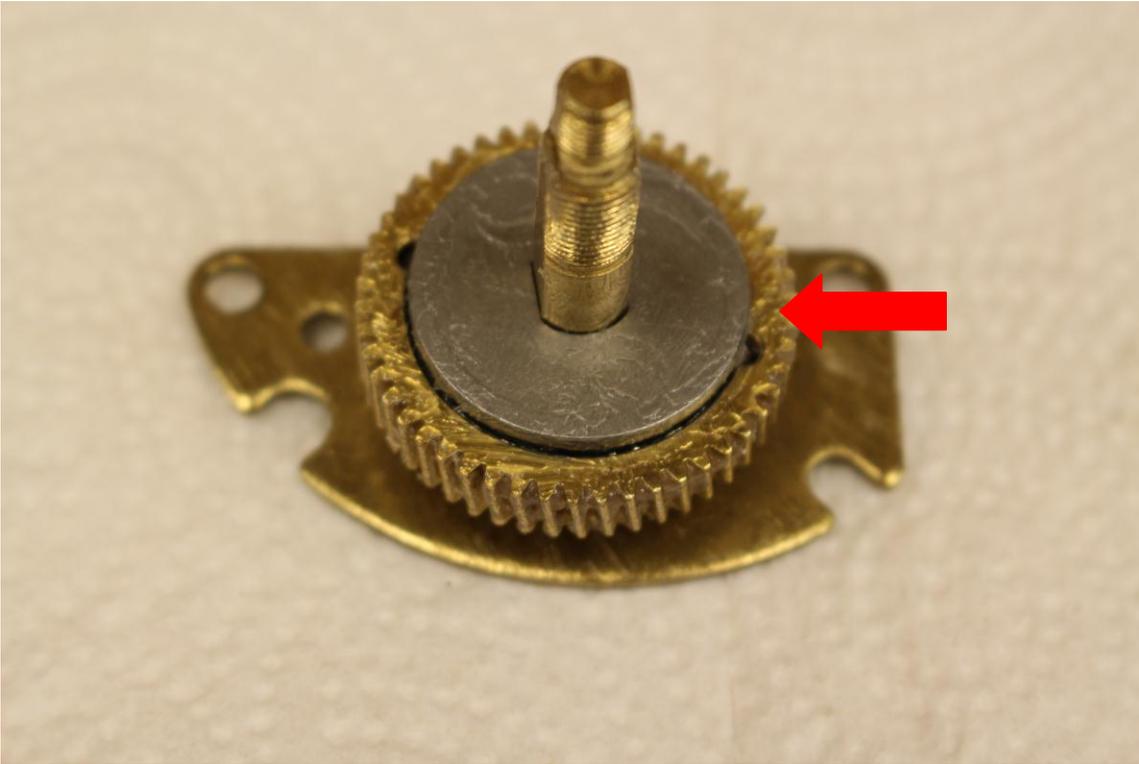


Coat the bottom surface of the thick metal Drag Washer with drag grease and insert it into the Drive Gear with the flats aligned with the flats on the bottom metal drag washer.

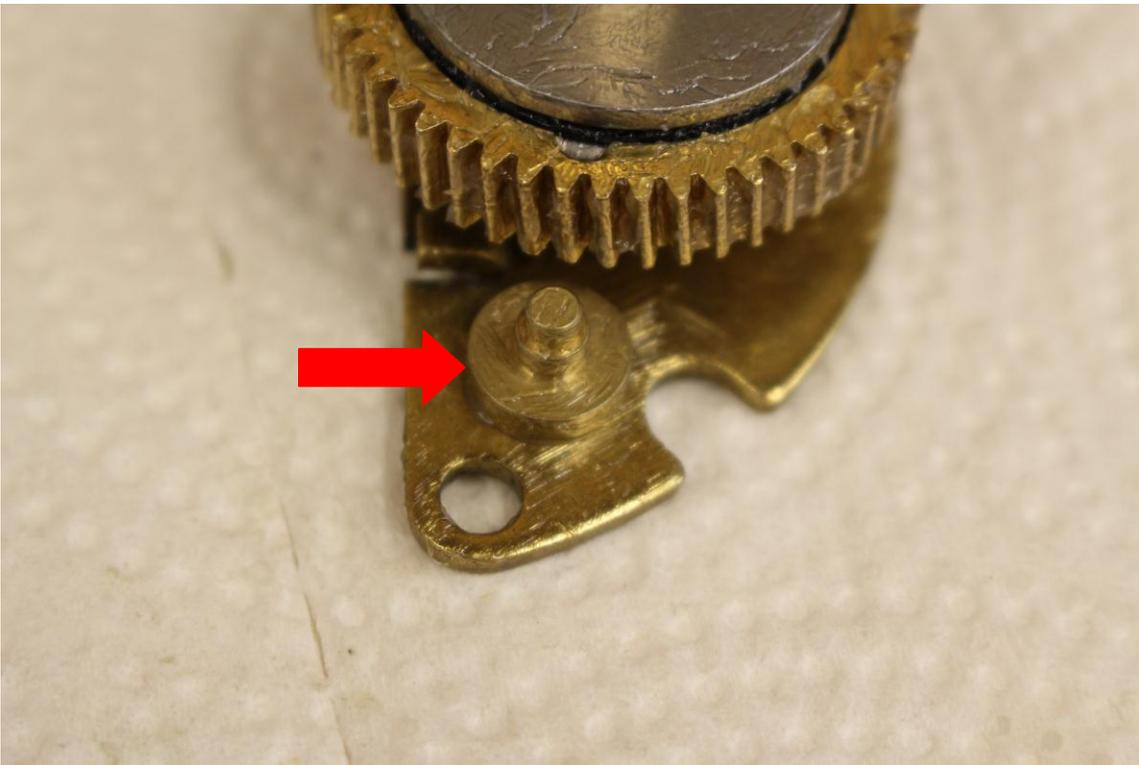


Coat the Drive Shaft with grease to prevent corrosion. Coat the carbon fiber Drive Gear Washer with drag grease and install it on the Drive Shaft.

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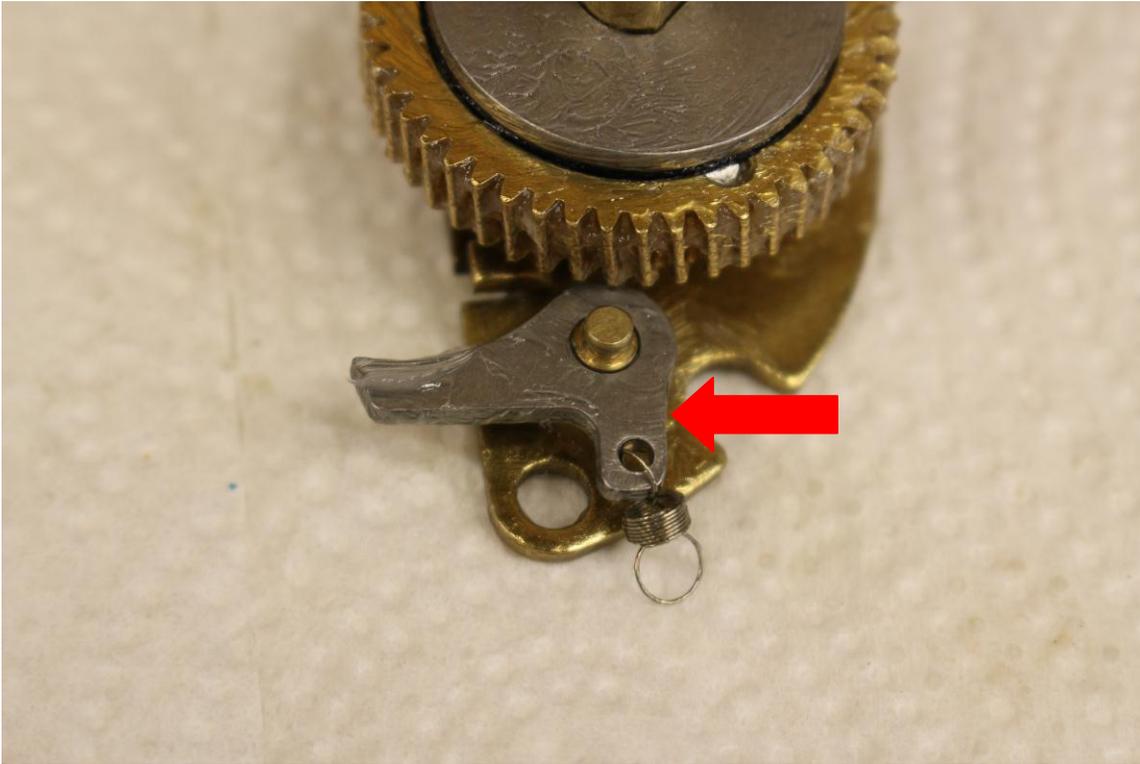


Coat the bottom surface of the Drive Gear (where it will contact the Drive Gear Washer) with drag grease. Coat the gear teeth and all other surfaces of the Drive Gear with grease. Slide the Drive Gear and drag washers onto the Drive Shaft. Coat the top surface of the top metal Drag Washer with grease.

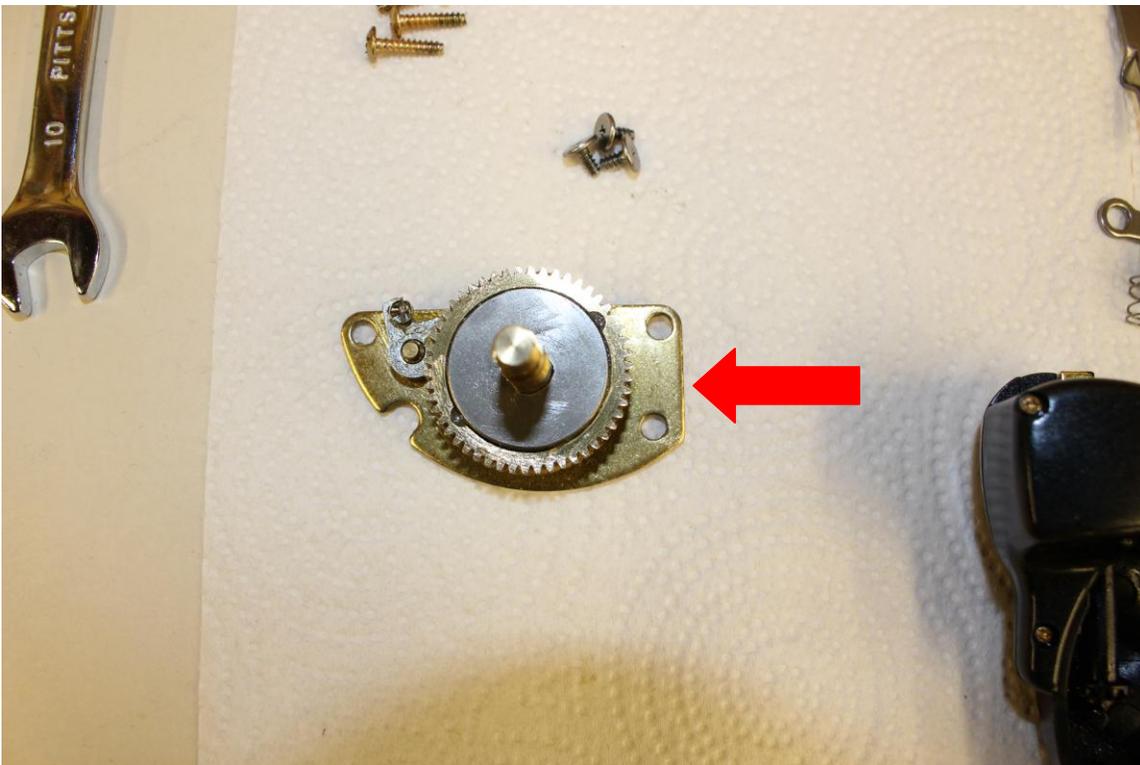


Grease the Anti-Reverse Pawl Pin and install it in the Hold Plate with the long shaft up.

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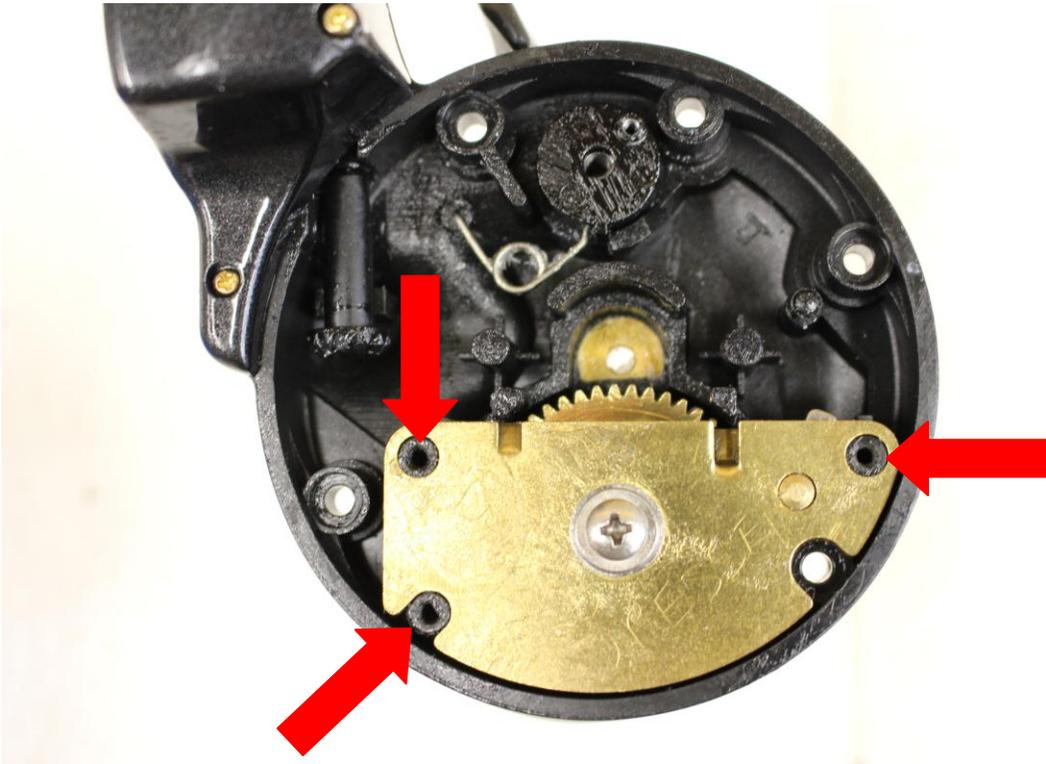


Grease the Anti-Reverse Pawl and install it on the Anti-Reverse Pawl Pin as shown, then rotate it to the right so the Pawl tip engages the Anti-Reverse Gear on the Drive Shaft under the Drive Gear.



Hold Plate assembly is complete. Hold the Hold Plate assembly in one hand with the Drive Shaft up. Flip the side plate so the outside surface is up, then lower the side plate over the Drive Shaft while aligning the Hold Plate holes with the posts on the side plate.

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Install the 3 Hold Plate Screws and tighten them until they are snug. You may want to scribe your name on the Hold Plate in case the reel is ever stolen.

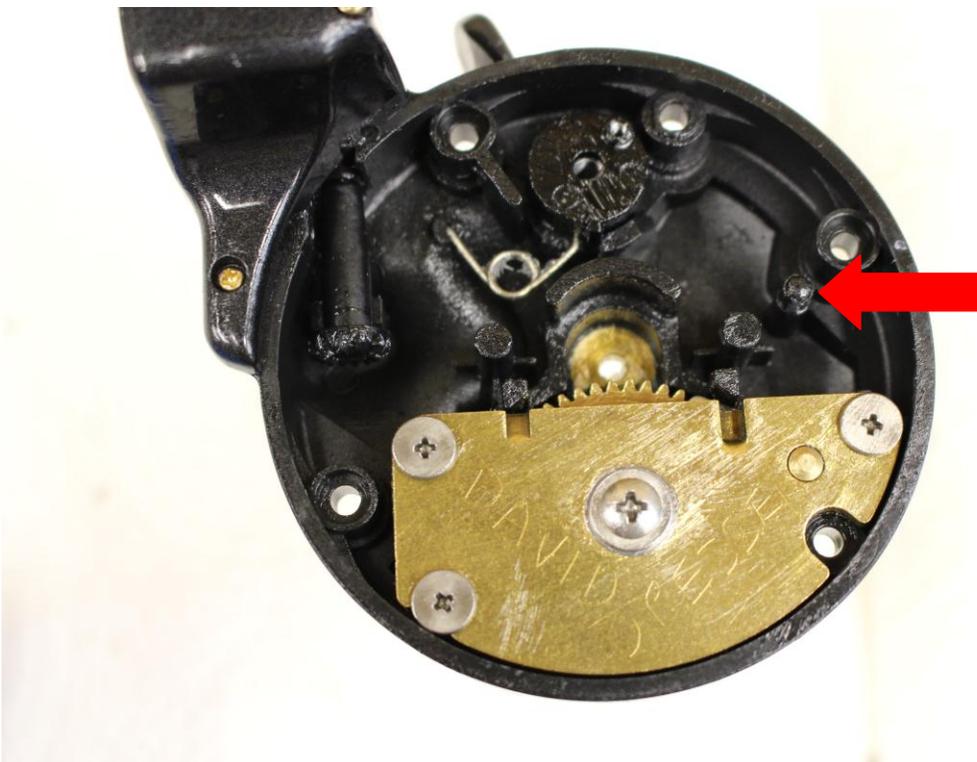
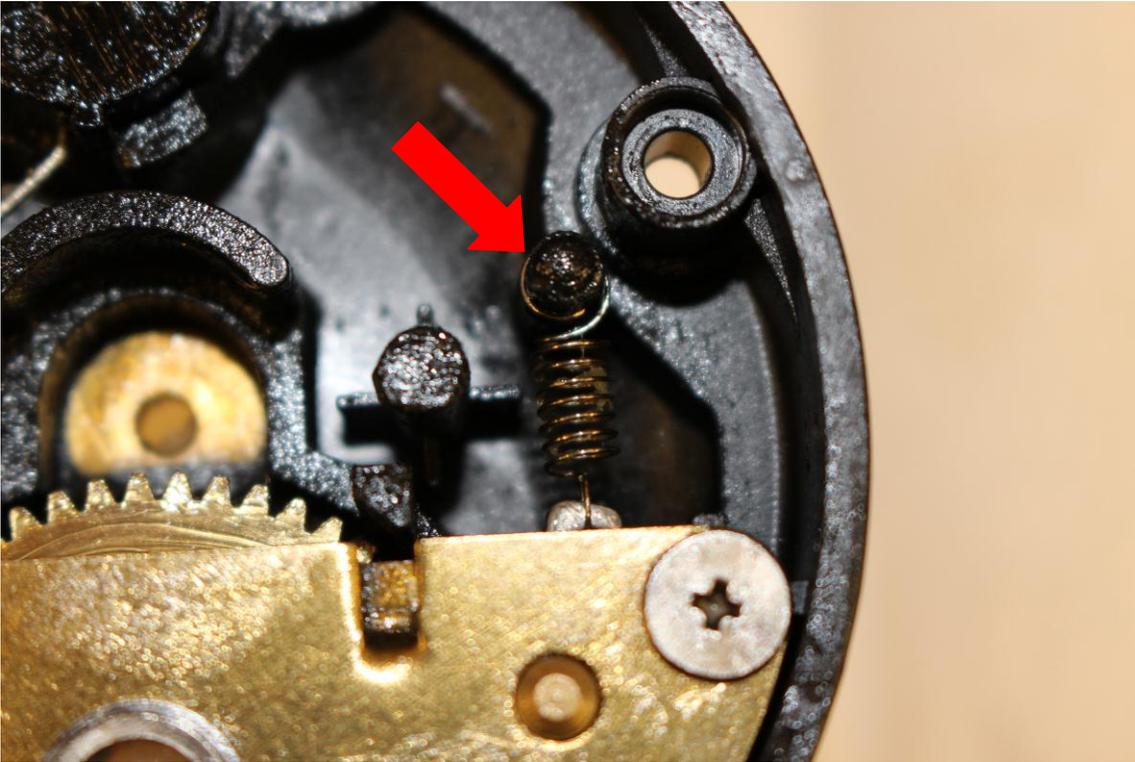
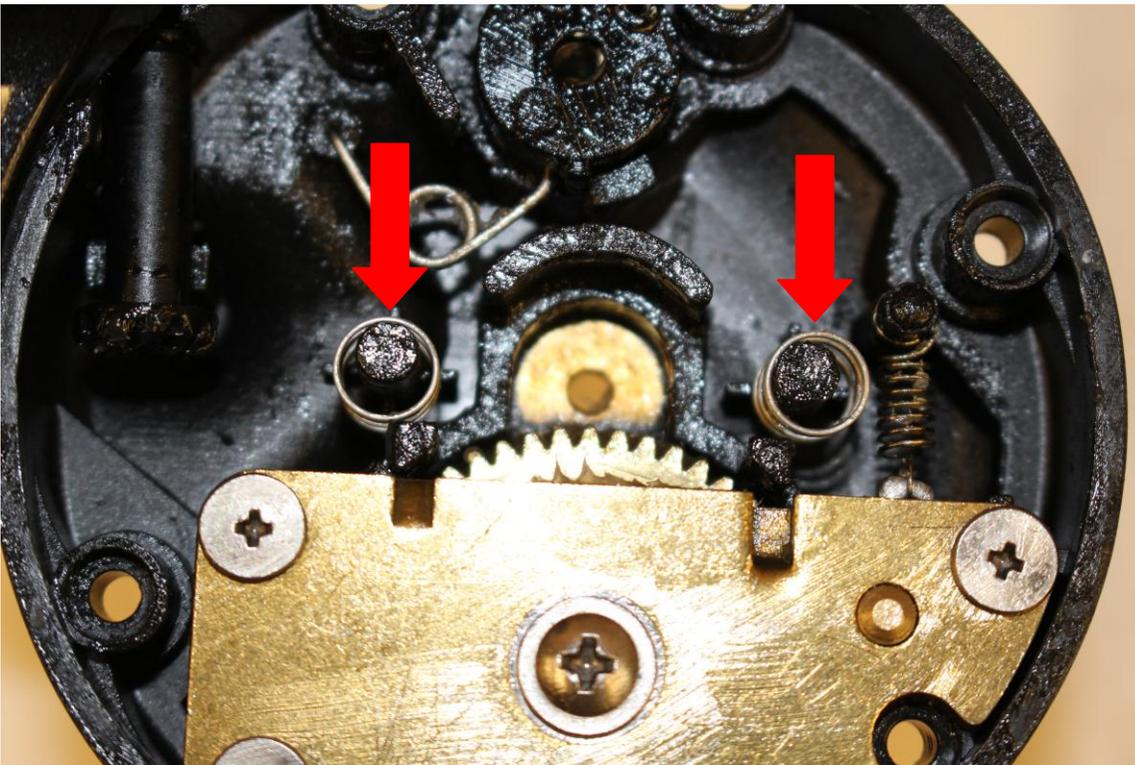


Photo showing the Hold Plate Screws installed. To complete the Hold Plate installation the Anti-Reverse Pawl Spring must be attached to the side plate spring post.

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Grab the loop on the end of the Anti-Reverse Pawl Spring and slide it over the side plate spring post.

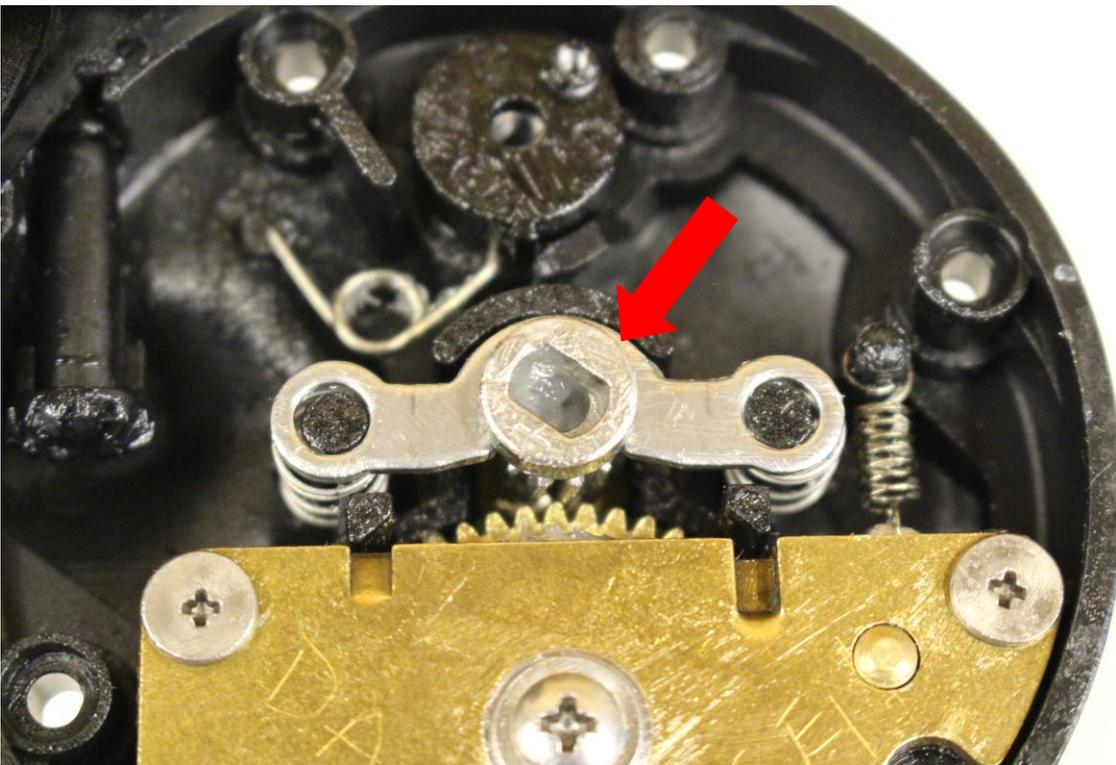


Grease and then install the two Yoke Springs by sliding them over the side plate posts.

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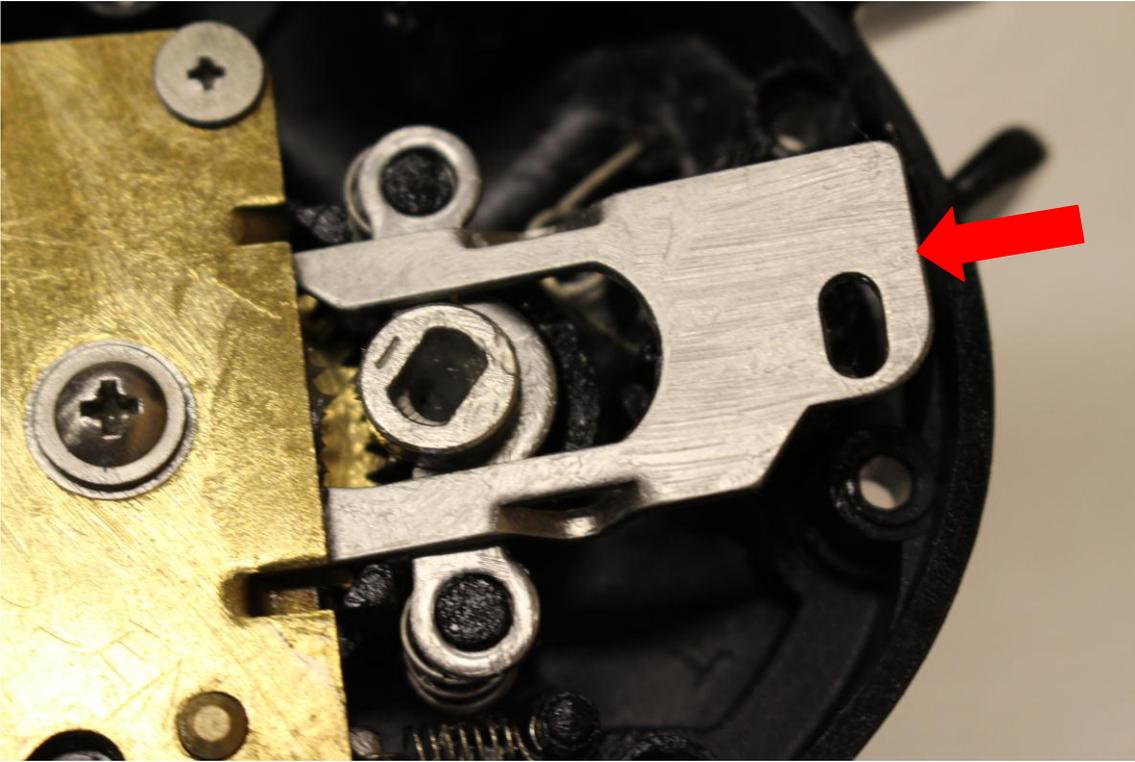


Grease the Pinion Gear and Pinion Gear Yoke then slide the Yoke onto the Gear as shown.

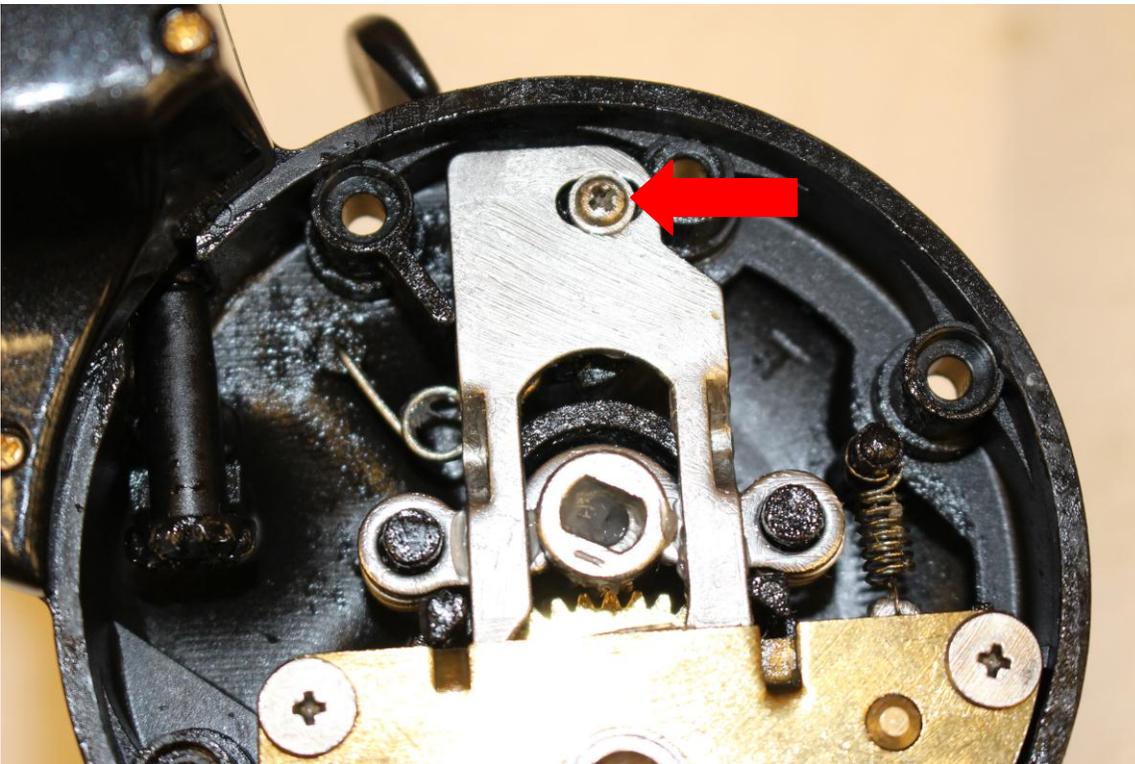


Install the Pinion Gear and Pinion Gear Yoke by sliding them over the side plate posts with the Yoke Springs.

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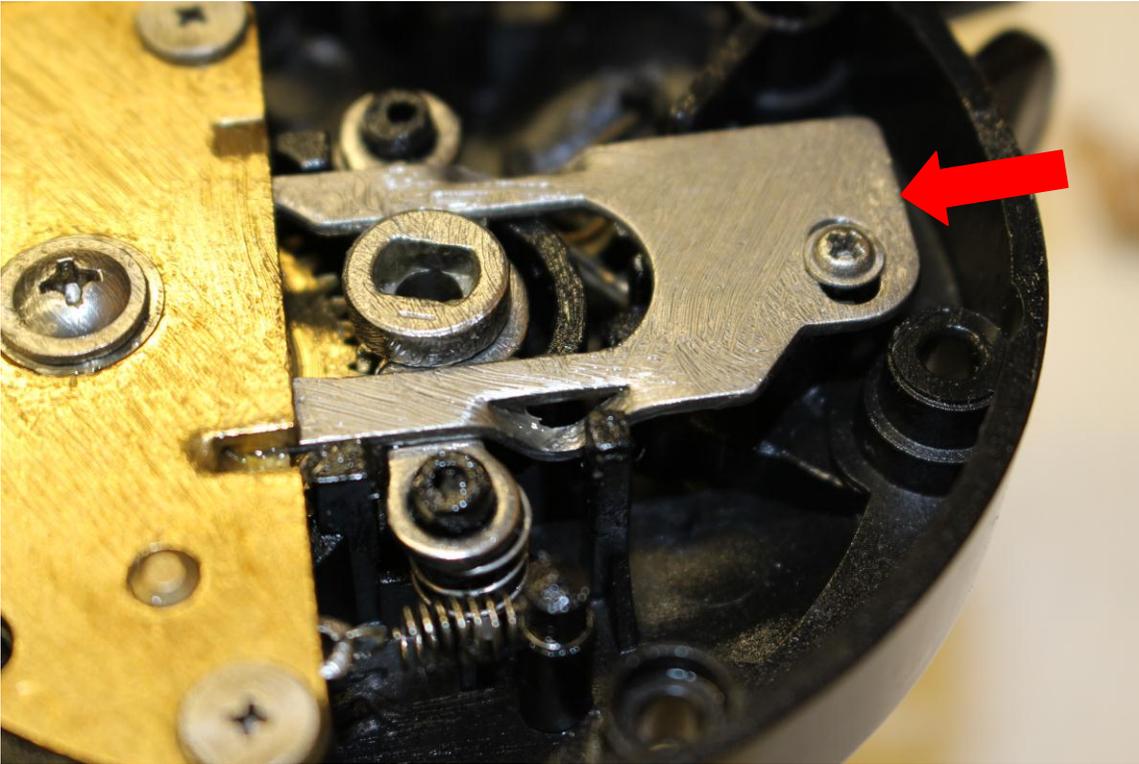


Grease the Clutch Cam Slider and install by sliding the ends under the Hold Plate and over the Pinion Gear Yoke.

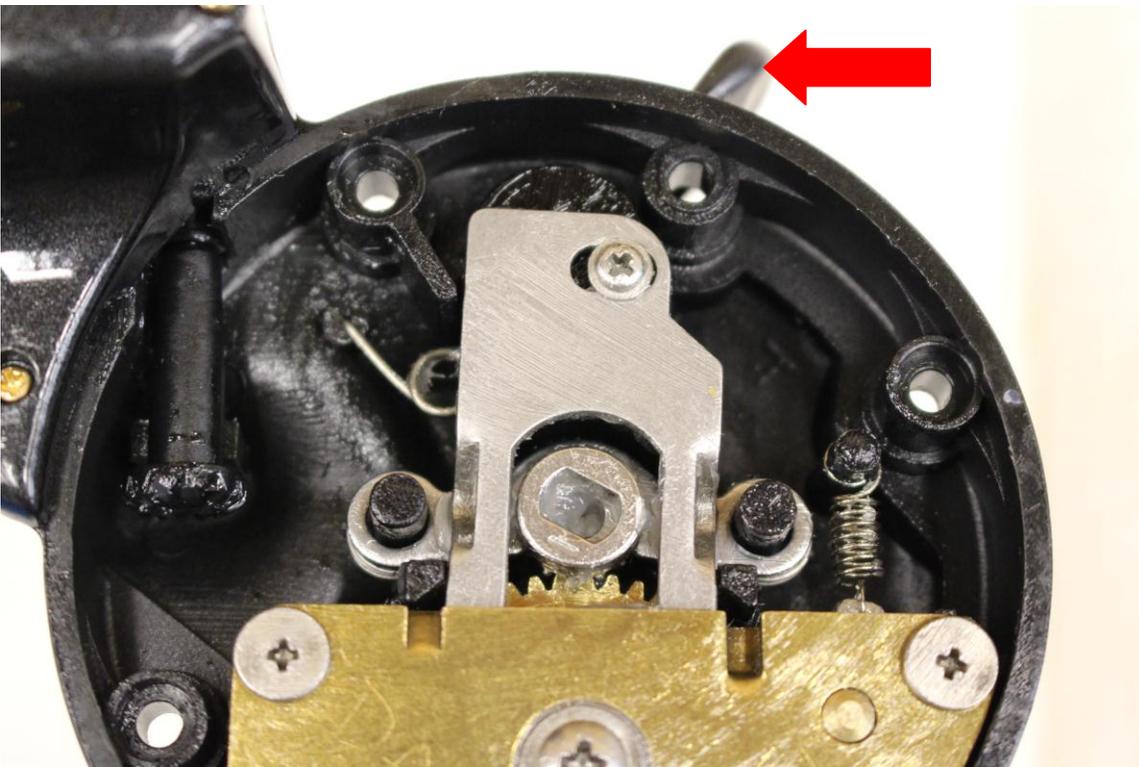


Push the Clutch Cam Slider onto the post on the Clutch Cam and then install the Clutch Cam screw.

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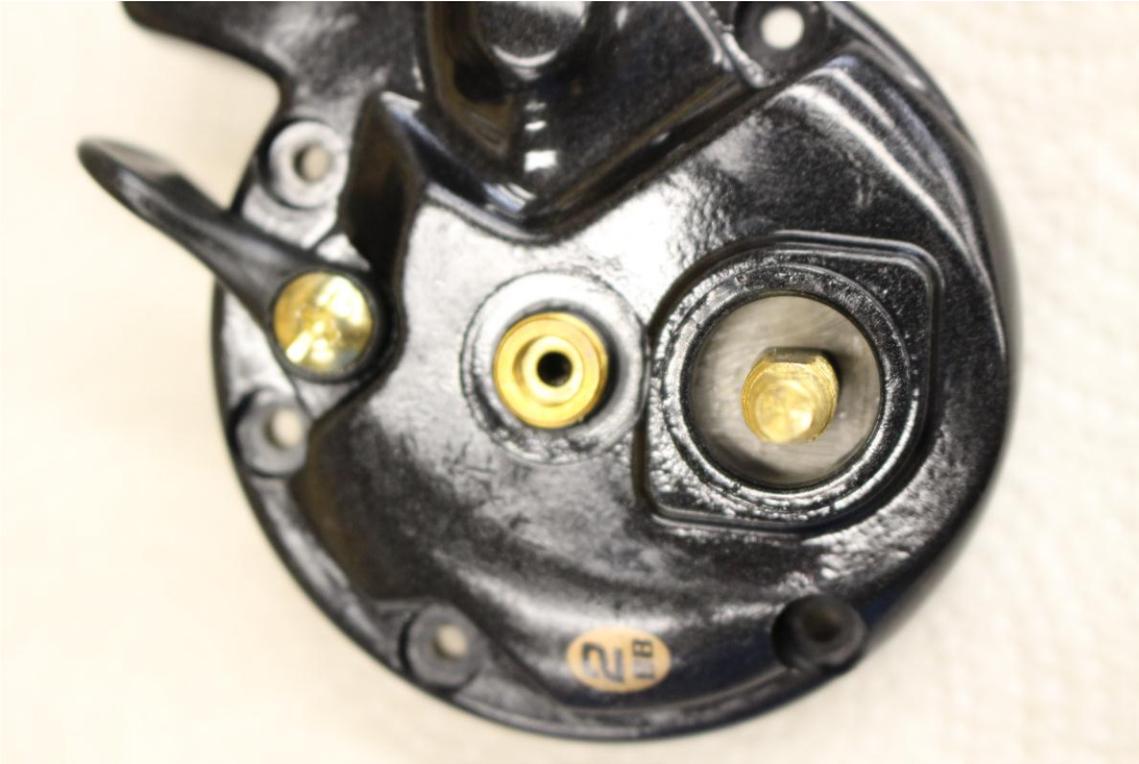


Side view of the Clutch Cam Slider after installation. Make sure there is plenty of grease on all the contact points.

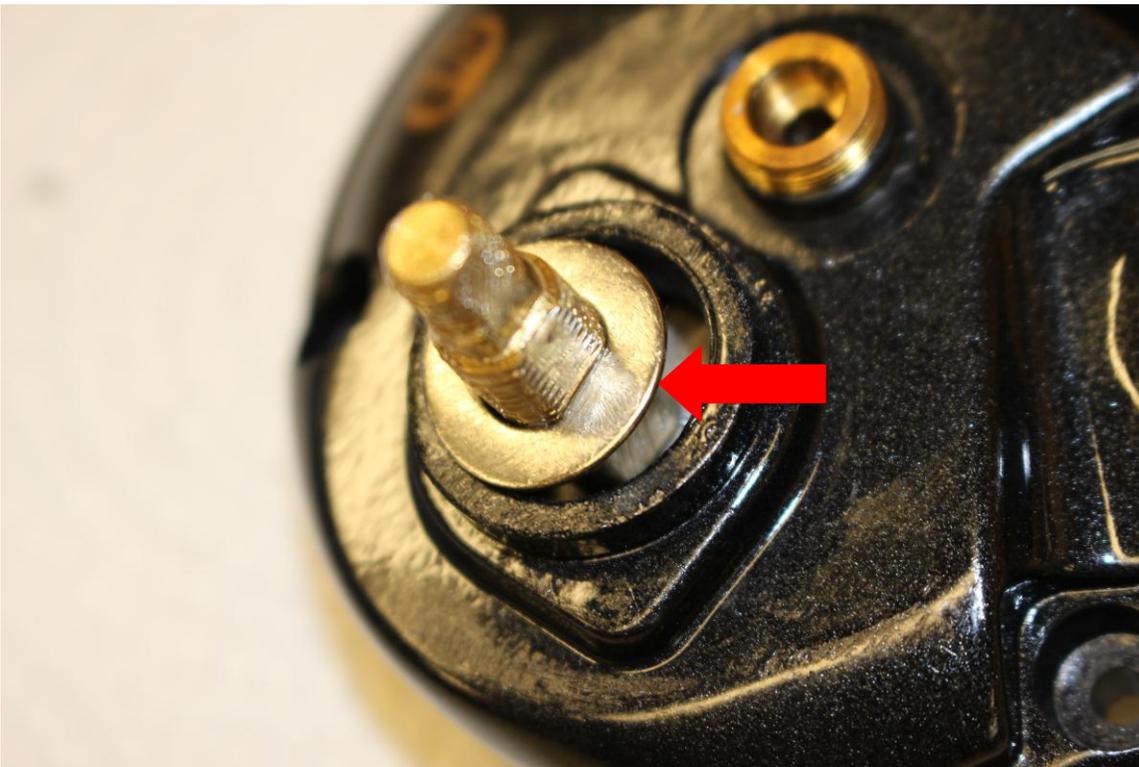


Move the Clutch Bar (Lever) to verify that the Clutch mechanism moves freely.

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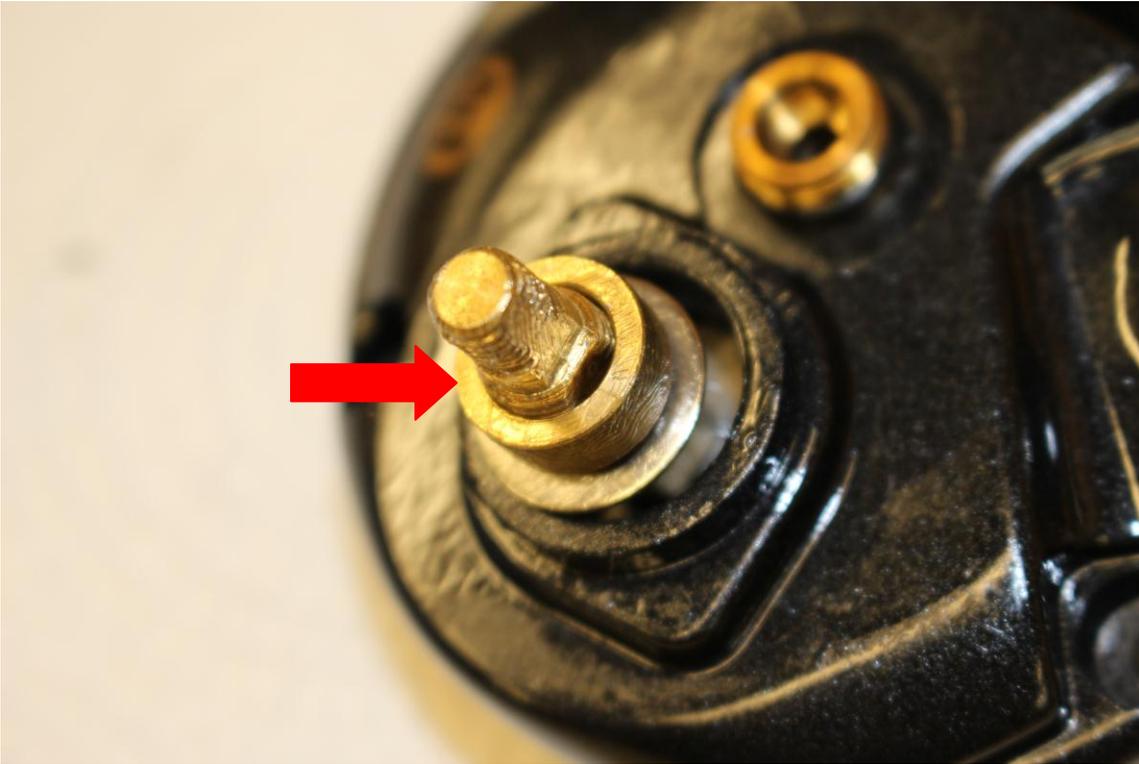


Flip the Right Side Plate over.

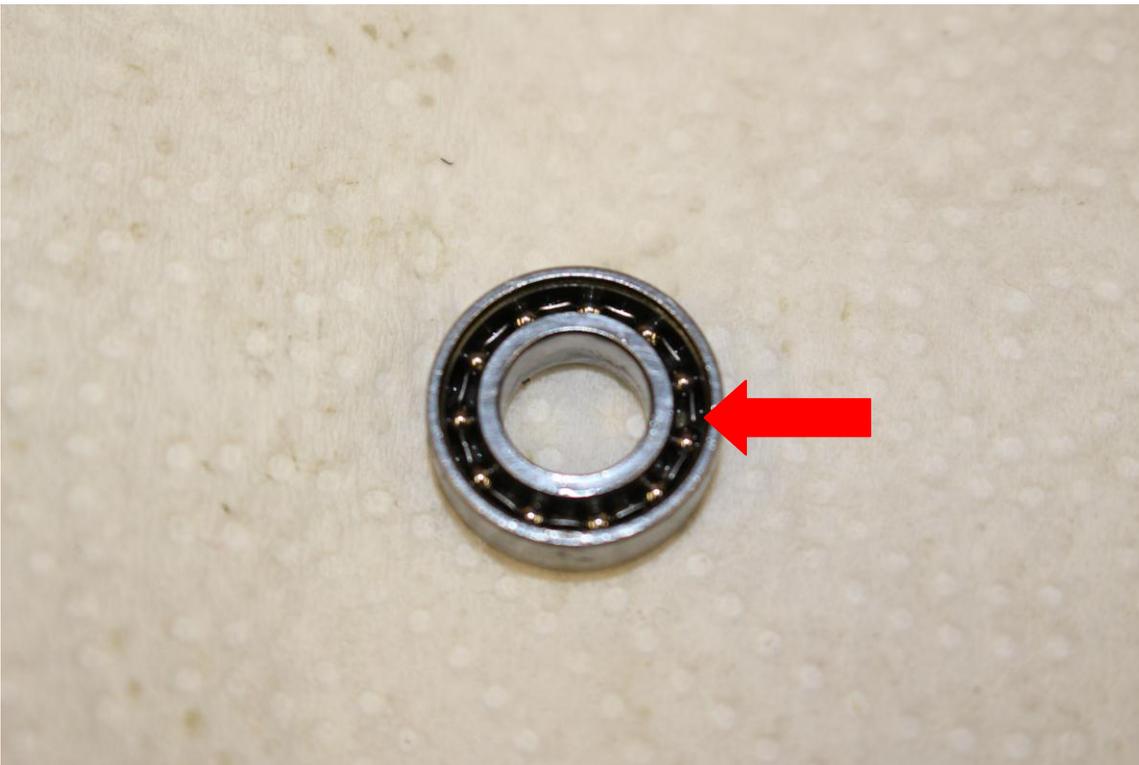


Grease and install the Drag Spring Washer oriented with the concave side down.

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Grease and install the Drive Gear Shaft Bushing.

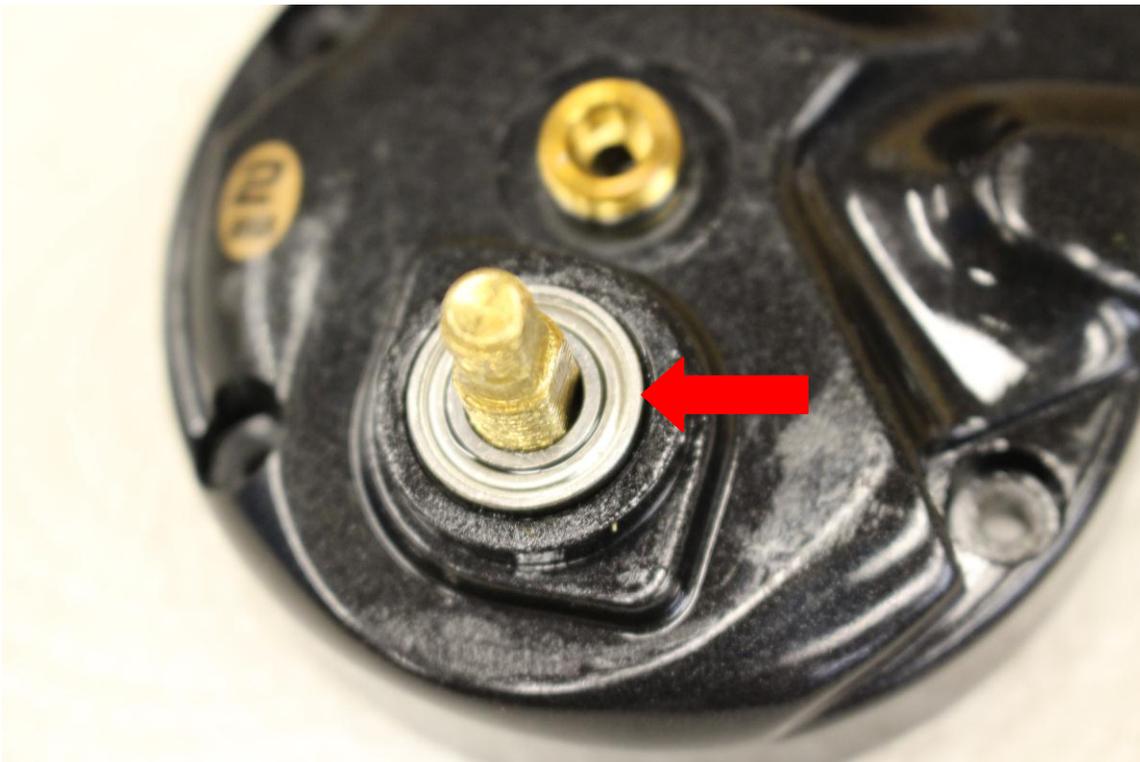


Put one drop of oil into the side of the Ball Bearing which has the shield removed, then rotate the bearing a few turns to spread the oil over all of the bearing and race surfaces. [Part 3 of the tutorial shows how the Ball Bearing shield is removed.]

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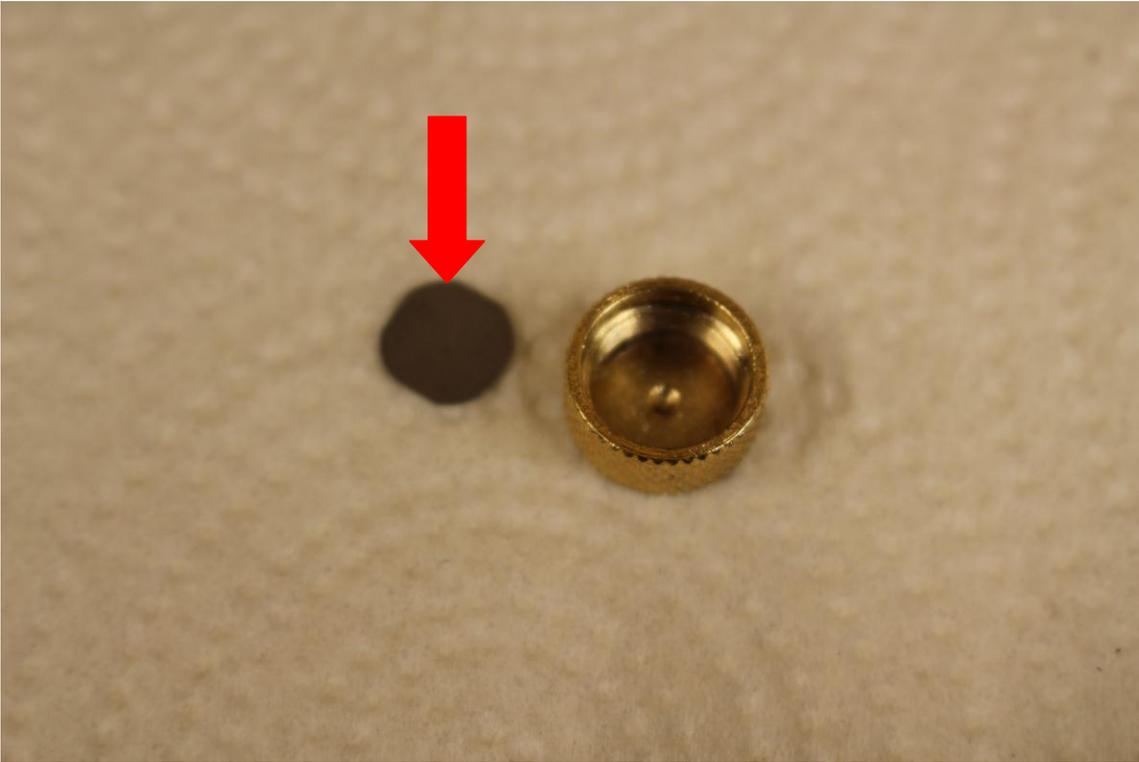


Pack the Ball Bearing with grease. I used Silicote grease because it comes in a tube with an applicator tip which is a convenient size for applying the grease. Super Lube would work just as well for greasing Ball Bearings. Try not to get lots of grease on the outer race of the Ball Bearing; we don't want the race to spin in the side plate.



Slide the Ball Bearing onto the Drive Shaft with the open side of the Ball Bearing down.

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Grease the spacer and insert it into the Cast Control Knob.



Install the Cast Control Knob. It is easier to do this before the Star Drag is installed.

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Install the Star Drag knob on the Drive Shaft, tightening it only until you feel resistance. The Star Drag does not need to be tight.



Side view of the Star Drag installed.

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Assembly of the Right Side is complete. The handle will be installed after the side plates are assembled onto the reel body.

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End of Part 5: Assembly of the Right Side.

This is a 6 part Tutorial:

Part 1: Disassembly to the Reel frame.

Part 2: Disassembly of the Right Side.

Part 3: Disassembly of the Left Side, and cleaning tips.

Part 4: Assembly of the Left Side.

Part 5: Assembly of the Right Side.

Part 6: Assembly of the Reel frame.

I hope you enjoyed this tutorial. Please address any comments to user: WeyeFisherCO on the Reel Repair forums at alantani.com.

It seems a little silly to put a disclaimer on a reel tutorial, but better safe than sorry, so here it is:

DISCLAIMER: The information in this document is presented without any kind of warranty. The procedures and methods described worked for the author and his circumstances, but there is no guarantee they will work for you, or are the best methods available. Sometimes manufacturers change components or designs without changing the model numbers; two reels with the same model number may not contain exactly the same components or be assembled the same way. Be aware of the hazards associated with chemicals; use extreme care when handling/using hazardous chemicals. Wear safety glasses. USE AT YOUR OWN RISK!

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