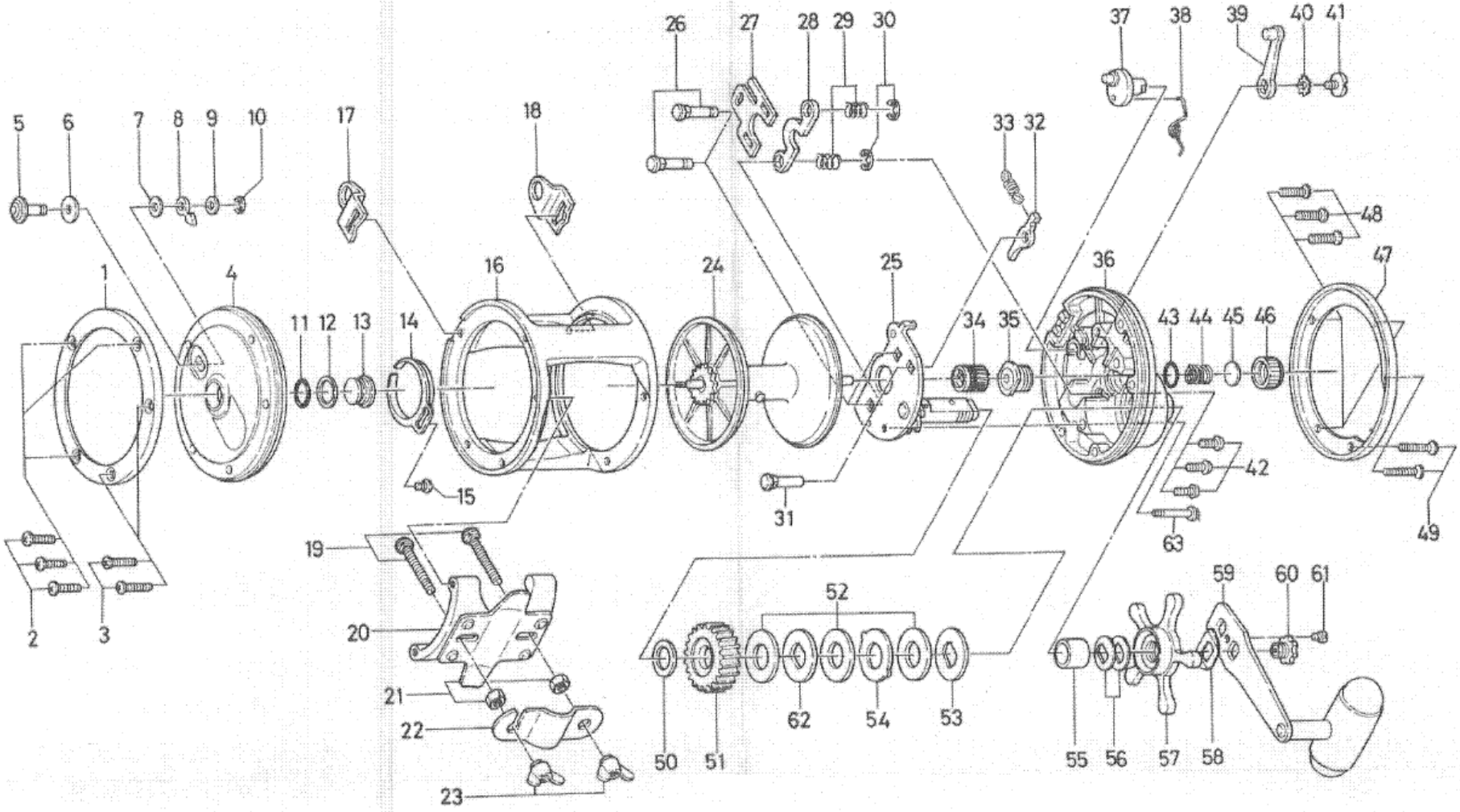
DAIWA SEALINE 400H and 450H (12-7-2008-ALAN TANI)

here's another diamond in the rough.

http://mikesreelrepair.com/schematics/schematic.php?url=Daiwa/Daiwa%20SL450H,%20450HW.pdf

MULTIPLYING REEL

Sealine 450H
Sealine 450HW



Key No.	Parts No.	Parts Name
1	6-171-6101	L.S. ring
2	6-353-5101	L.S. plate screw A
3	6-353-6003	L.S. plate screw B
4	6-760-5707	L.S. plate
5	6-541-6311	Click button
6	6-375-9201	Click button washer
7	6-375-9301	Click claw washer A
8	6-030-6111	Click claw
9	6-373-2700	Click claw washer B
10	6-320-7601	Click claw retainer
11	6-171-1001	Friction ring
12	6-375-9802	Case metal washer
13	6-720-2711	Case metal
14	6-160-7801	Click spring
15	6-352-2201	Click spring screw
16	6-701-5804	Frame
17	6-041-4901	Harness lug
18	6-041-4901	Harness lug
19	6-353-9801	Rod clamp screw
20	6-782-4903	Stand
21	6-341-9701	Rod clamp nut
22	6-041-5601	Rod clamp
23	6-342-2111	Rod clamp wing nut
24A	6-734-3302	Spool for 450H
24B	6-B25-1501	Spool for 450HW
25	6-782-5101	Set plate
26	6-051-5611	Set plate pin A
27	6-041-6001	Eccentric jack
28	6-041-5301	Pinion yoke
29	6-144-8101	Clutch spring
30	6-320-1611	Clutch spring retainer
31	6-051-5511	Set plate pin B
32	6-111-7401	Anti-reverse claw
33	6-144-9511	Anti-reverse claw spring
34	6-750-5901	Pinion gear
35	6-720-2321	Ball bearing metal
36	6-B14-6901	R.S. plate
37	6-461-6701	Eccentric cam
38	6-145-2501	Eccentric cam spring
39	6-782-5001	Clutch lever
40	6-160-8001	Clutch lever lock washer
41	6-363-5301	Clutch lever screw
42	6-353-9701	Set plate screw
43	6-171-1001	Friction ring
44	6-145-3101	Spool adjusting spring
45	6-375-7501	Spool adjusting cap metal
46	6-382-0301	Spool adjusting cap
47	6-171-6001	R.S. ring
48	6-353-5101	R.S. plate screw A
49	6-353-6003	R.S. plate screw B
50	6-375-2901	Drive gear washer
51	6-413-9422	Drive gear
52	6-375-9402	Drag washer A
53	6-376-3001	Drag washer B
54	6-376-3101	Drag washer C
55	6-501-9221	Spacing sleeve
56	6-151-8701	Tension spring
57	6-782-5201	Star drag
58	6-151-9701	Handle washer
59	6-747-4112	Handle
60	6-780-7502	Handle screw
61	6-353-2811	Handle lock screw
62	6-376-3002	Drag washer B
63	6-B15-9101	Set plate screw B

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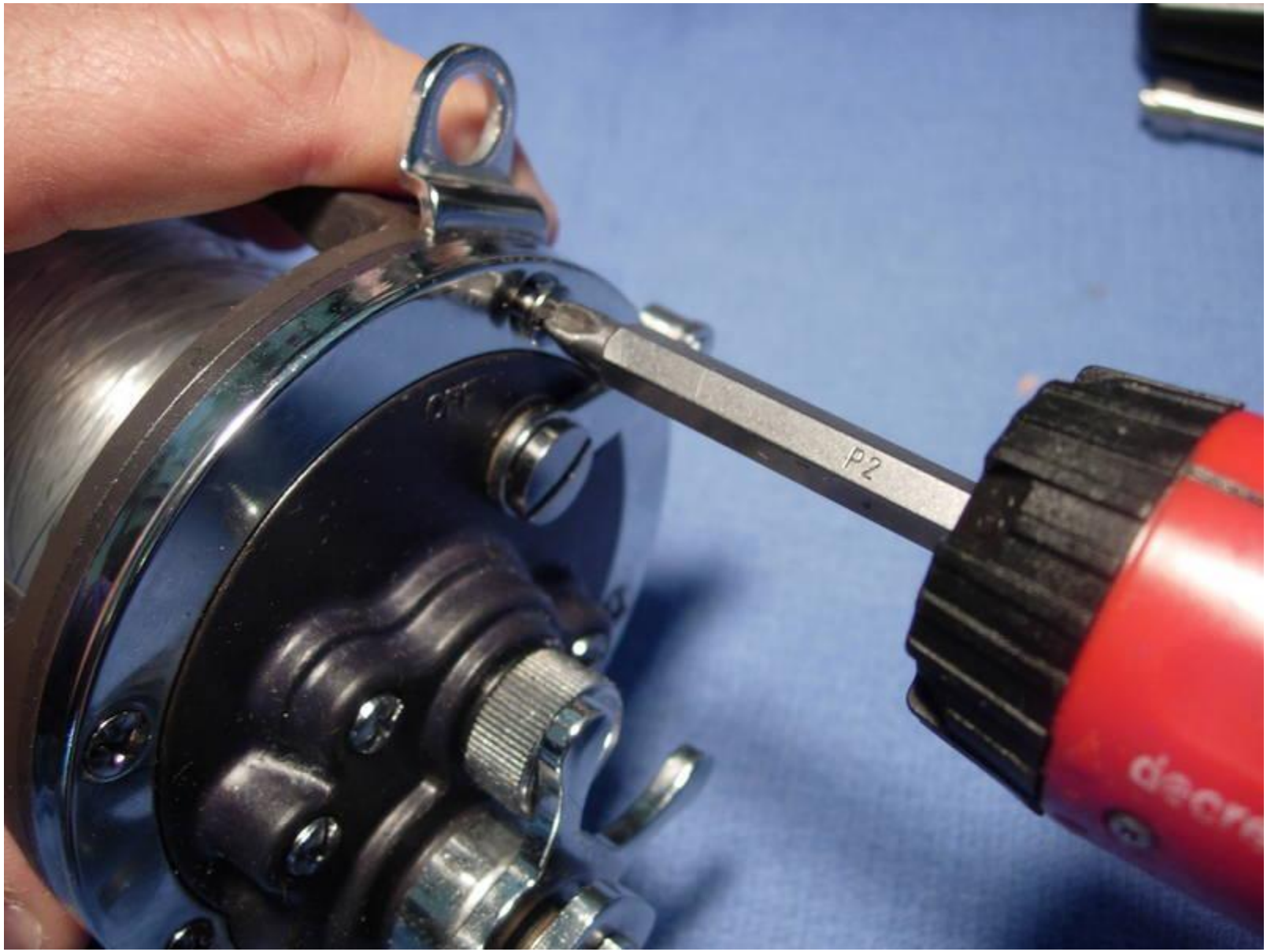
and here's your reel.

let's start with the left side plate. back out the three left side plate screw A's (key #2) and the two left side side plate screw B's (key #3) one at a time, grease the screw holes and re-install the screws.

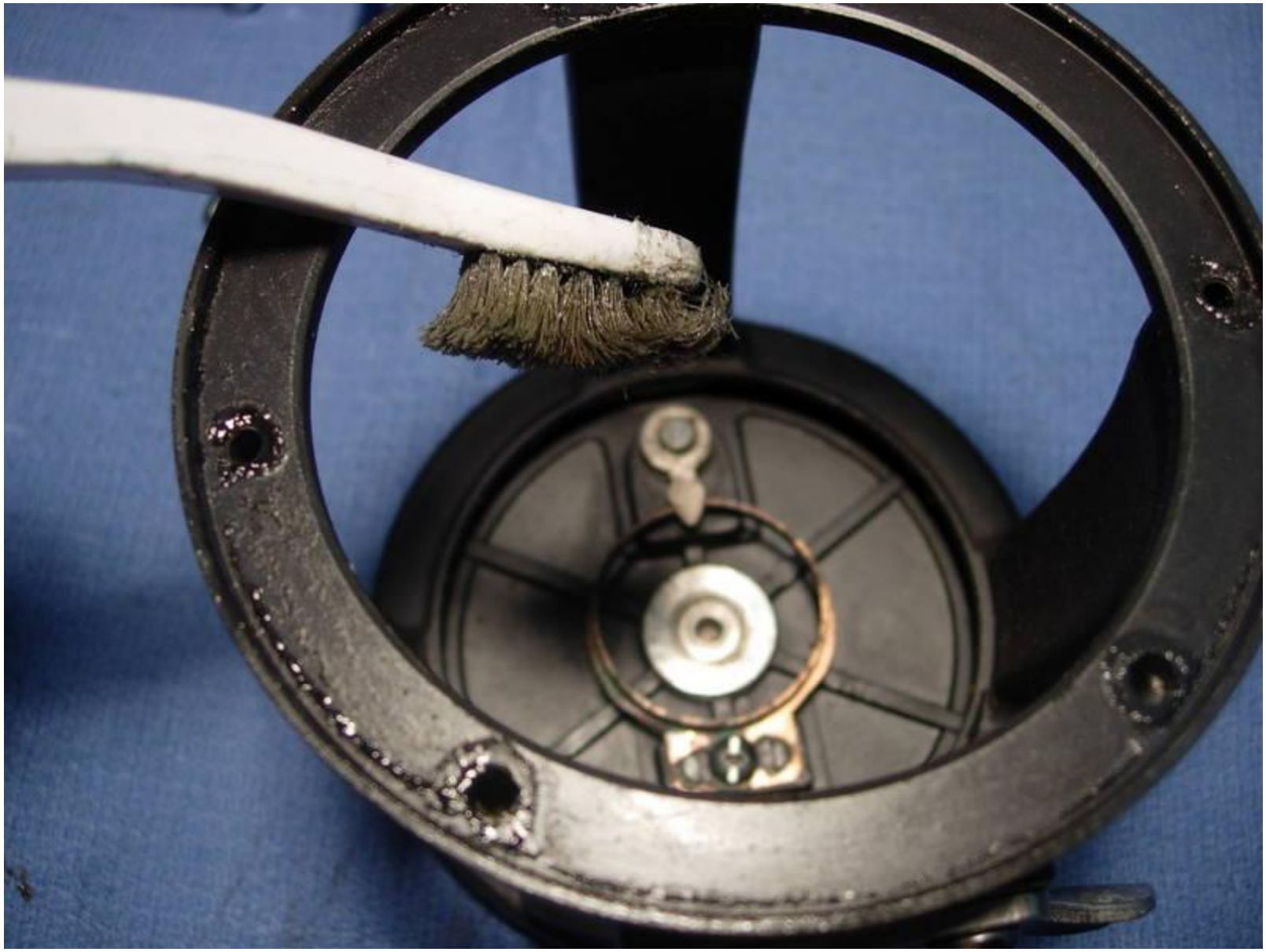
now back out the three right side plate screw A's (key #48) and two right side plate screw B's (key #49).



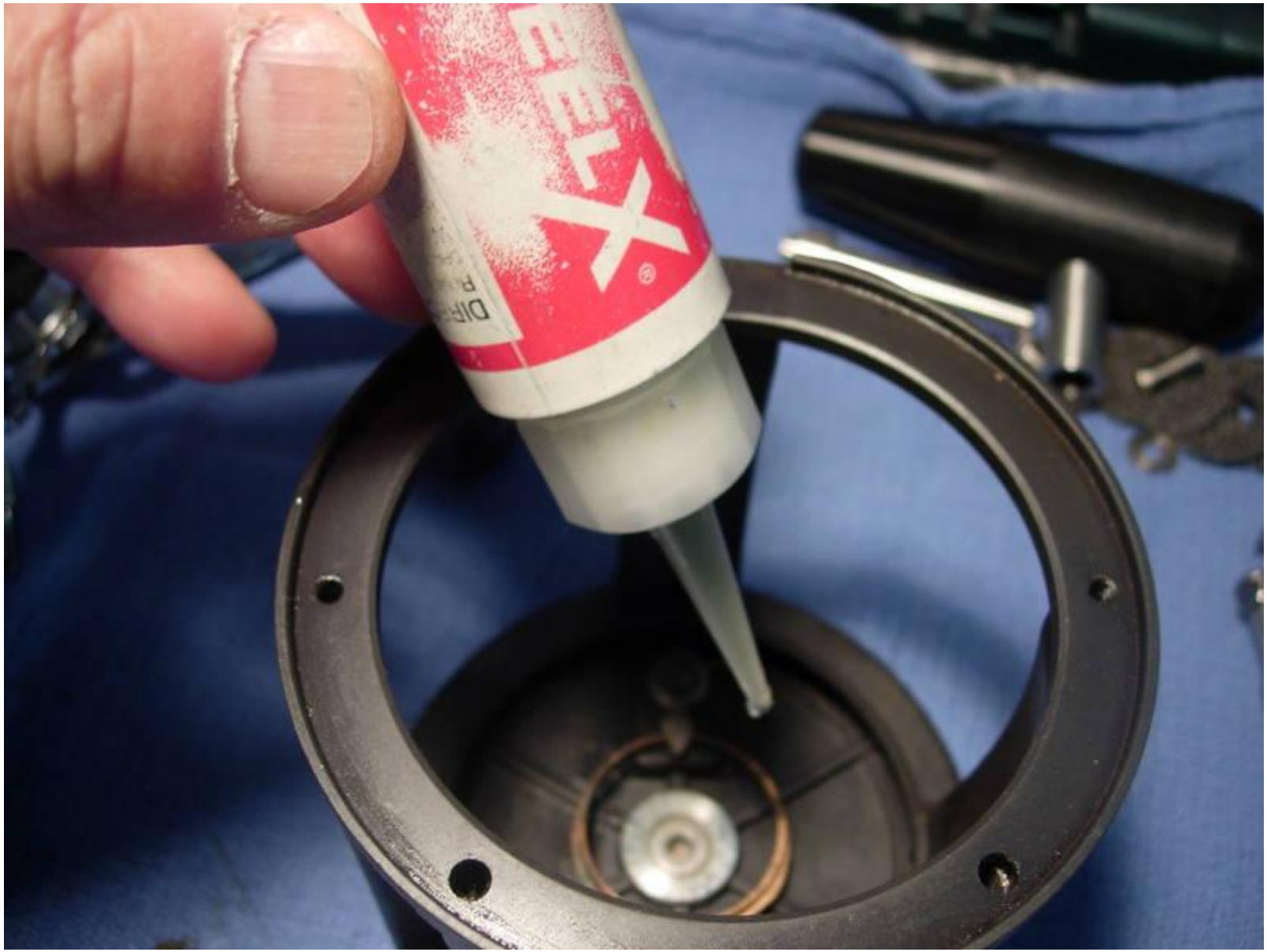
set them aside.

you now have a frame assembly (key #16), a spool (key #24) and right side plate assembly (key #36).

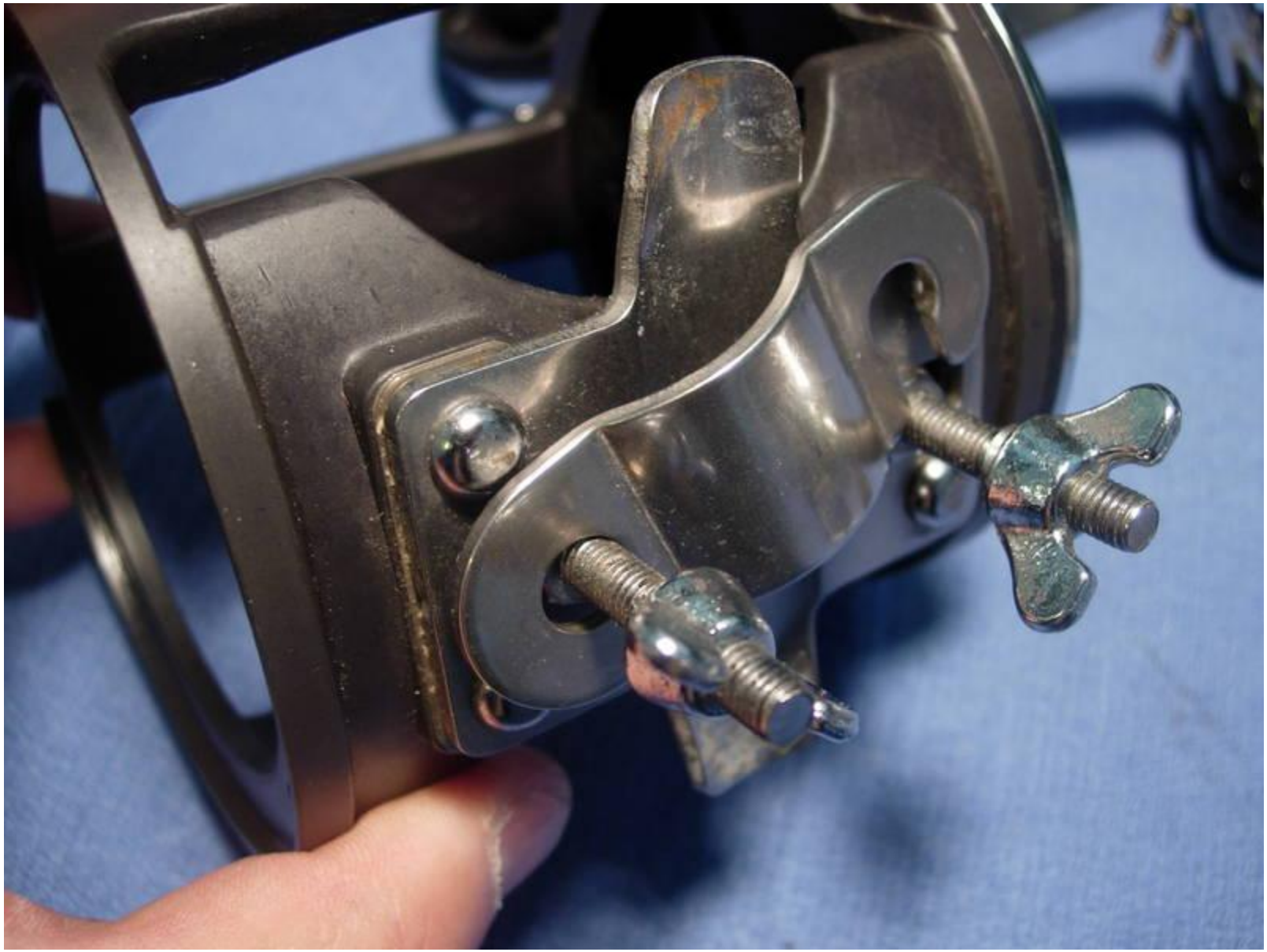
aluminum frames tend to corrode. take an old toothbrush and spread the old grease around a little, then wipe off all the excess.

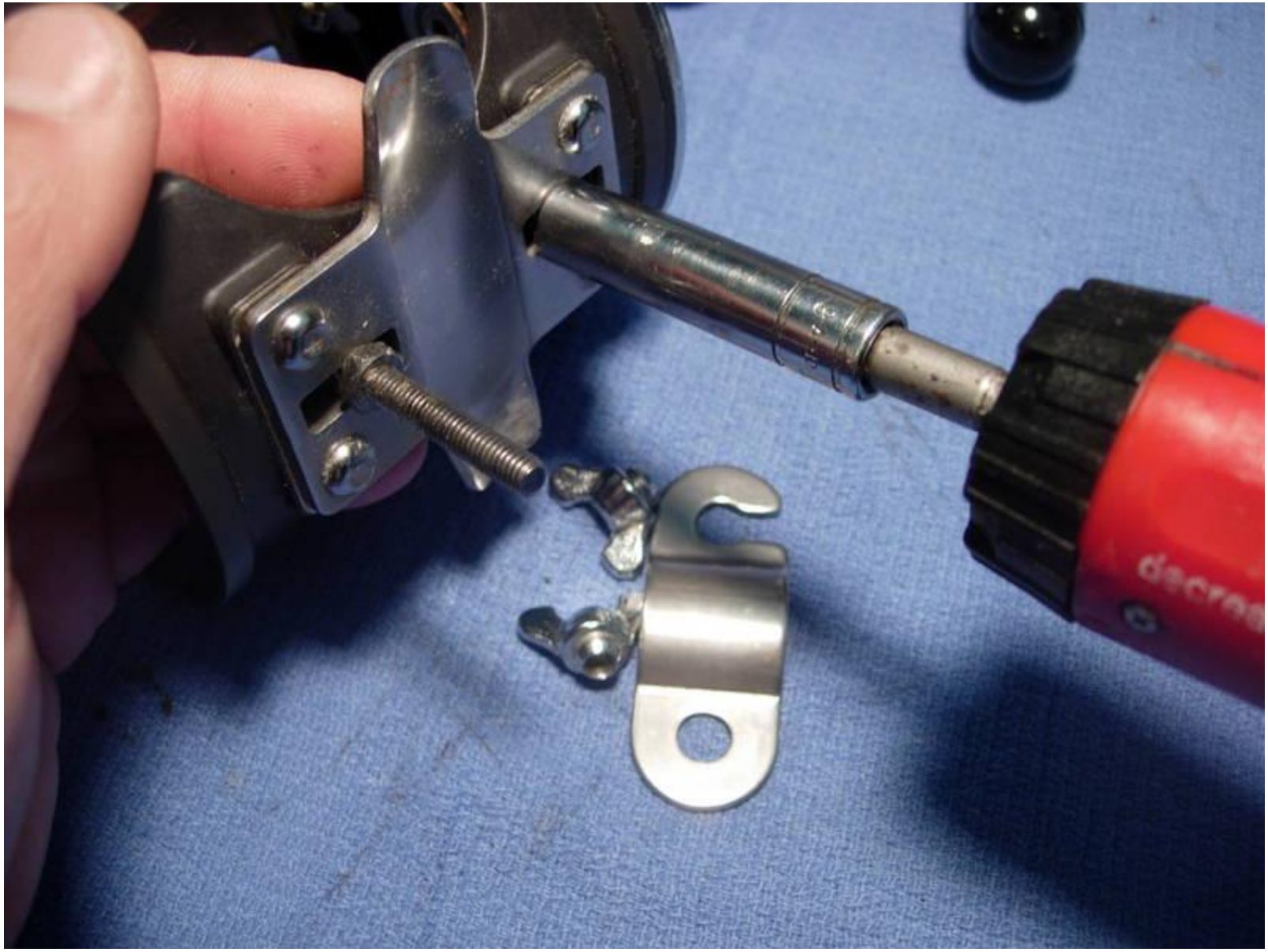


lube the left side plate bearing (key #13).



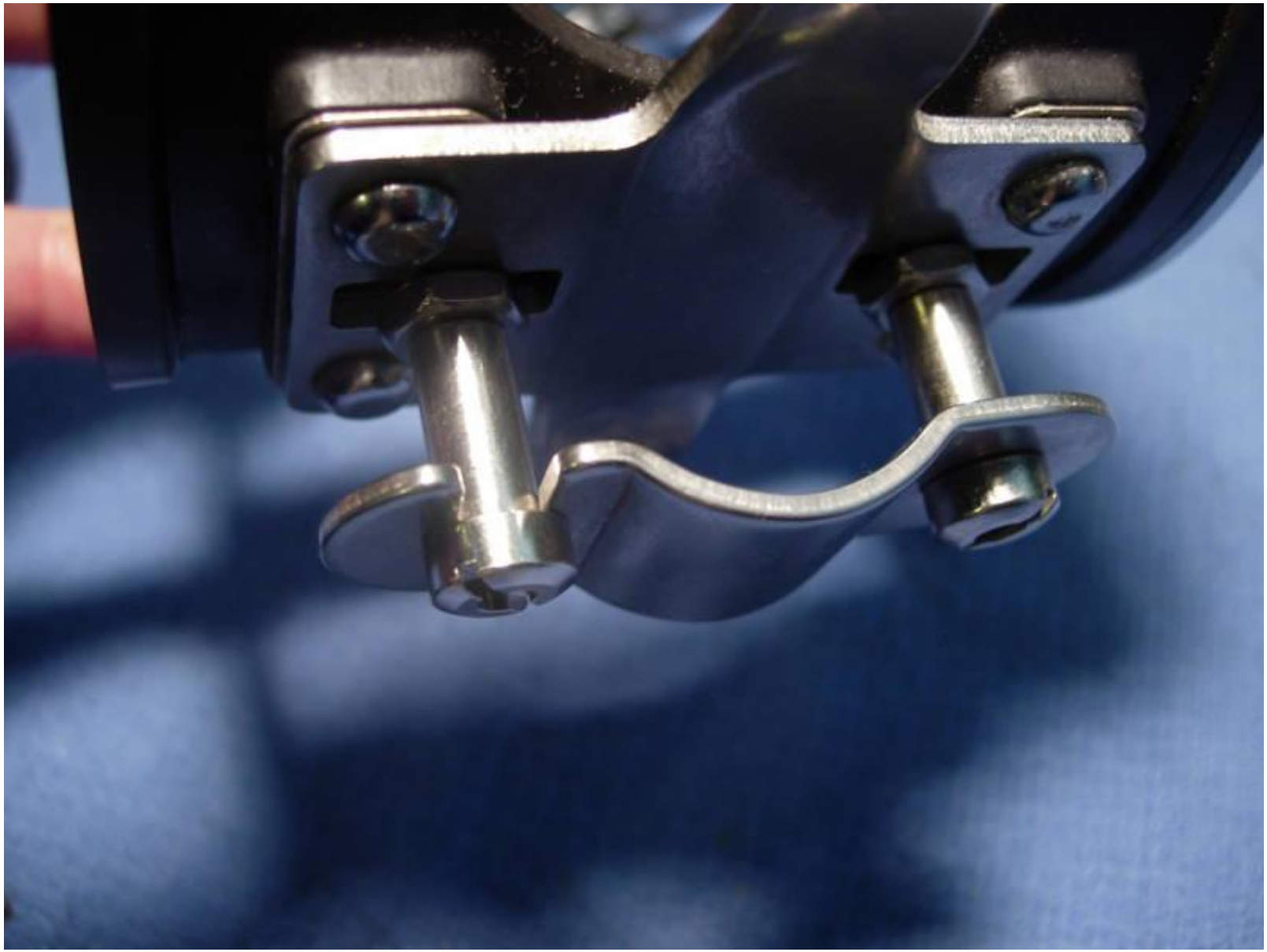
ok, the wing nuts have to go.



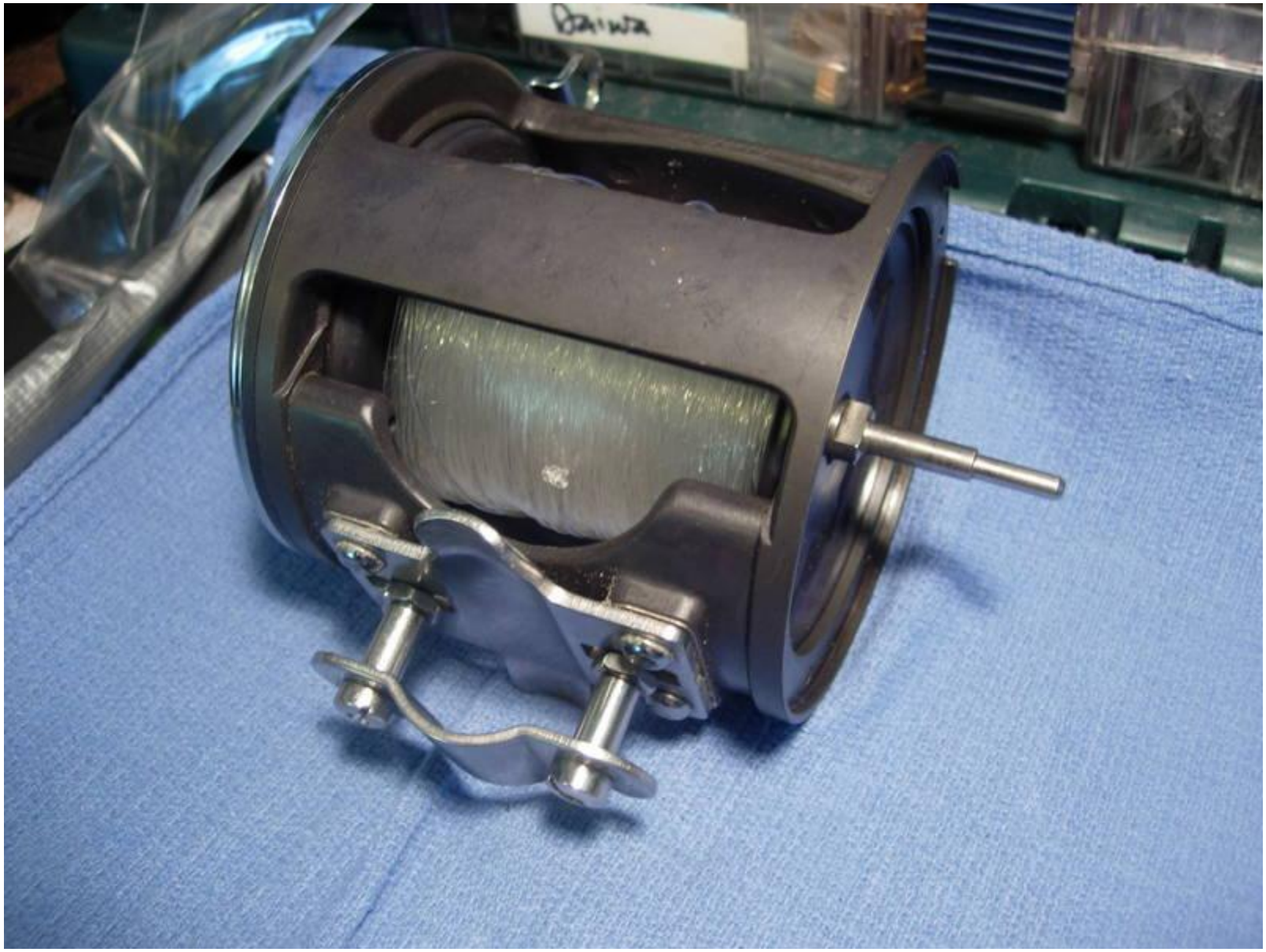


you have a choice of replacing just the clamp nuts and bolts, or the entire clamp all together. the bolts are penn part #34-35, the hex nuts are #149-200, the clamp nuts are 149-45, the bolt/hex nut/clamp nut kit is #34C-45, the penn clamp is #33-340, and the entire kit is called a 33-340sp kit. these are all penn parts.

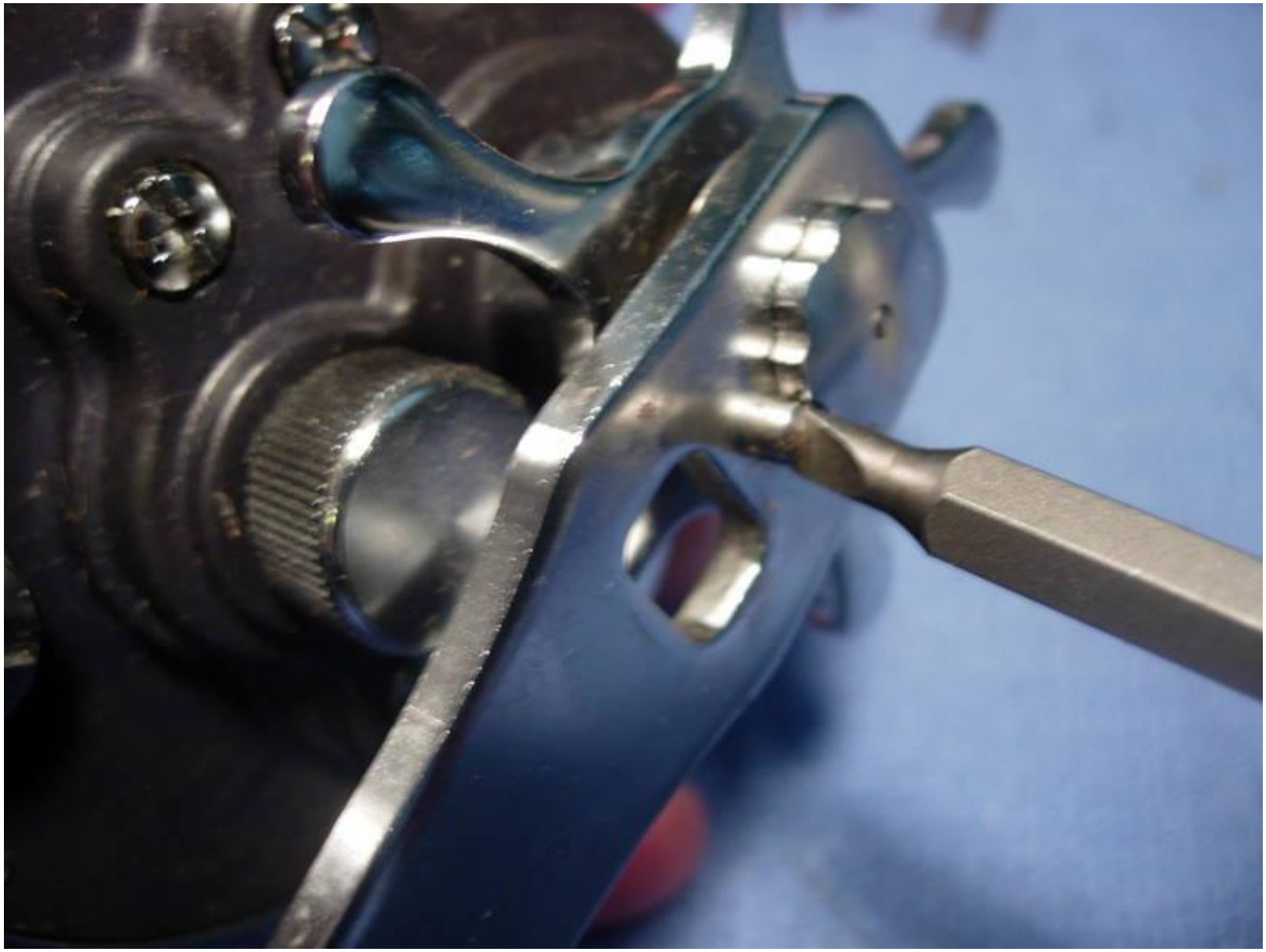
for this reel, we're going to replace everything but the clamp. nice, huh!



install the spool (key #24) into the frame assembly (key #16) and set both aside.



now, for the right side plate. remove the handle lock screw (key #61).



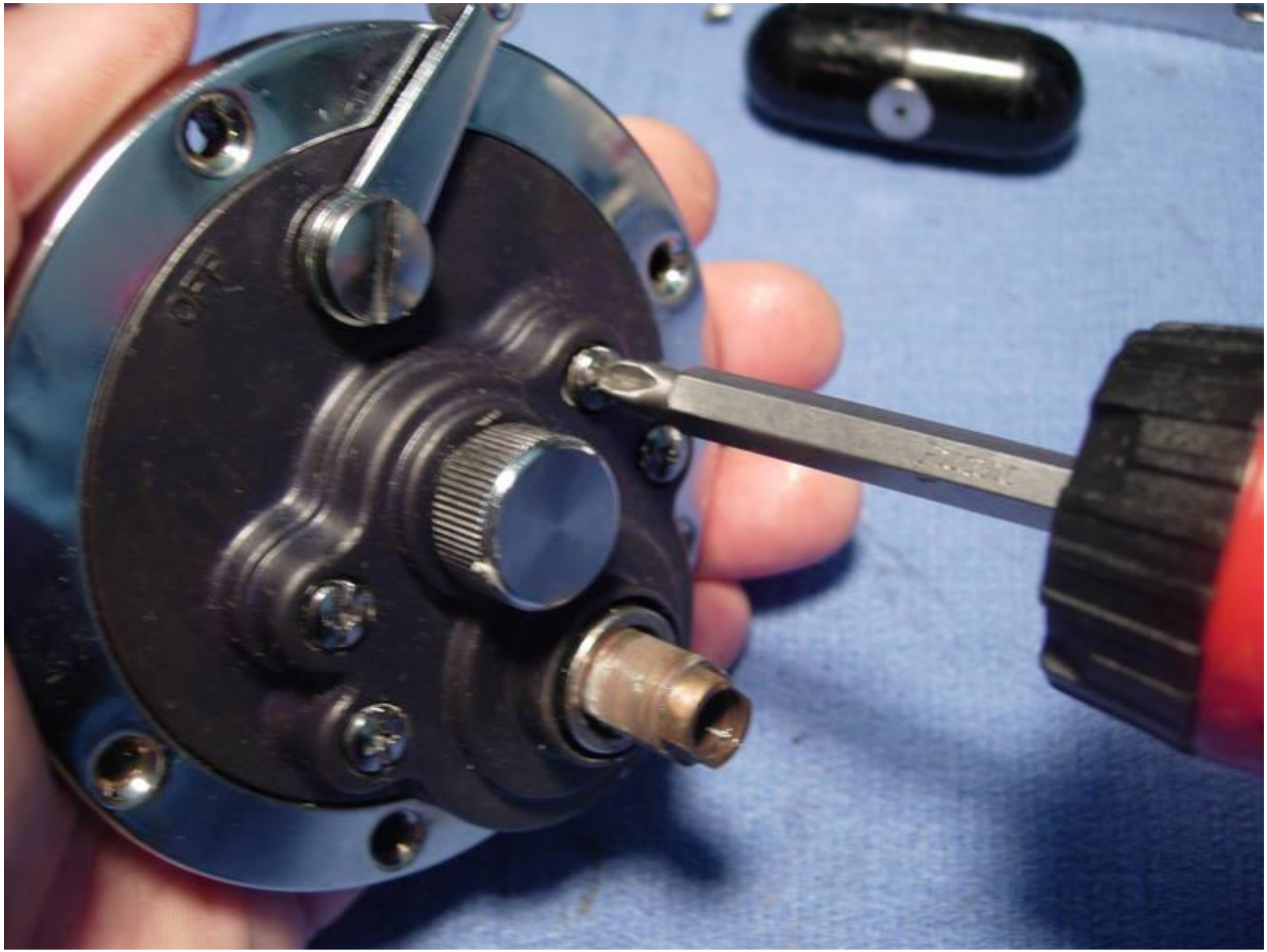
remove the handle screw (key #60). a penn wrench works well here.

remove the handle (key #59) and handle washer (key #58).

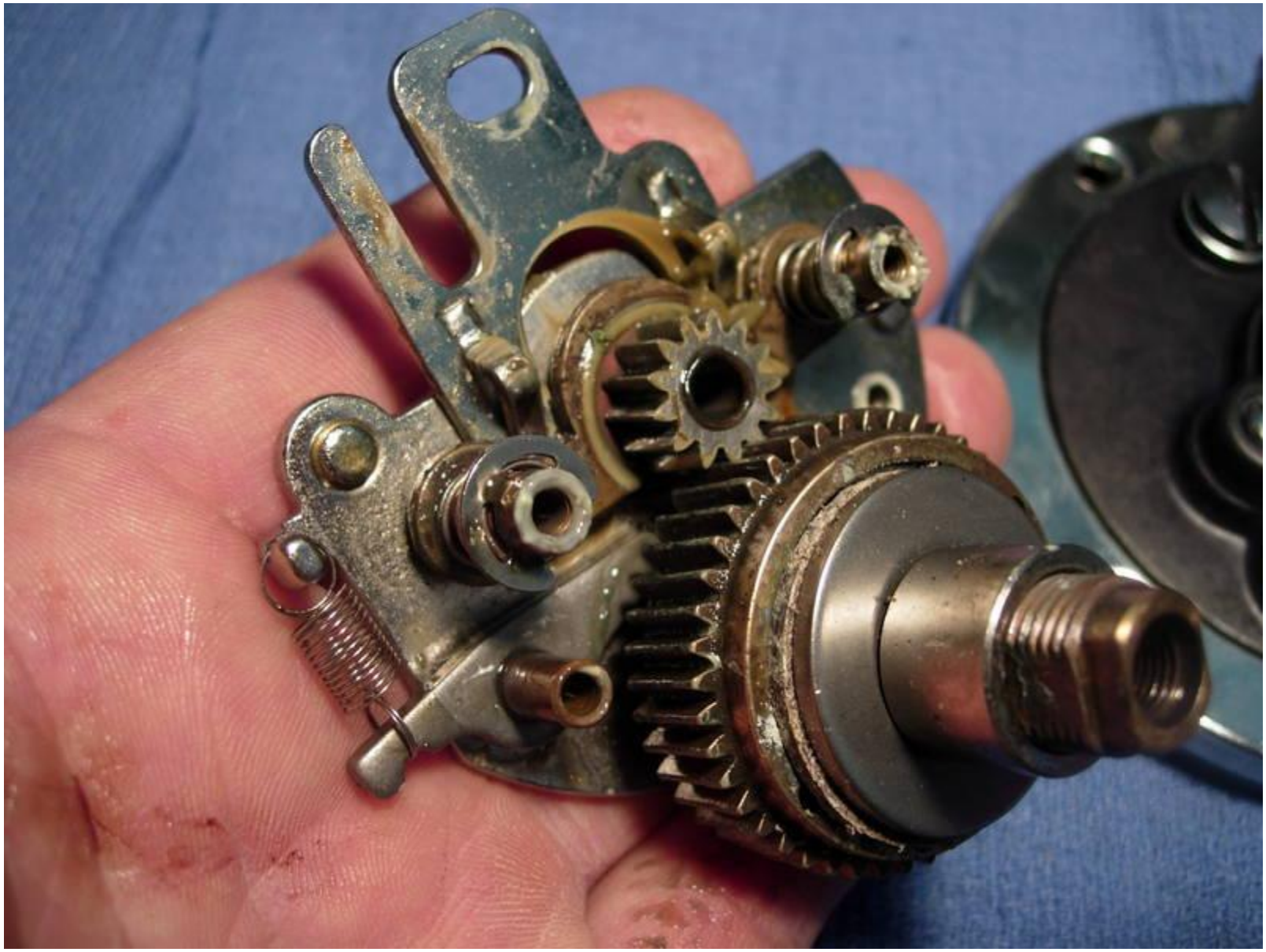
remove the star drag (key #57).

remove the tension springs (key #56). note that they are cupped "()".

remove the three set plate screw A's (key #42) and the single set plate screw B (key #63).

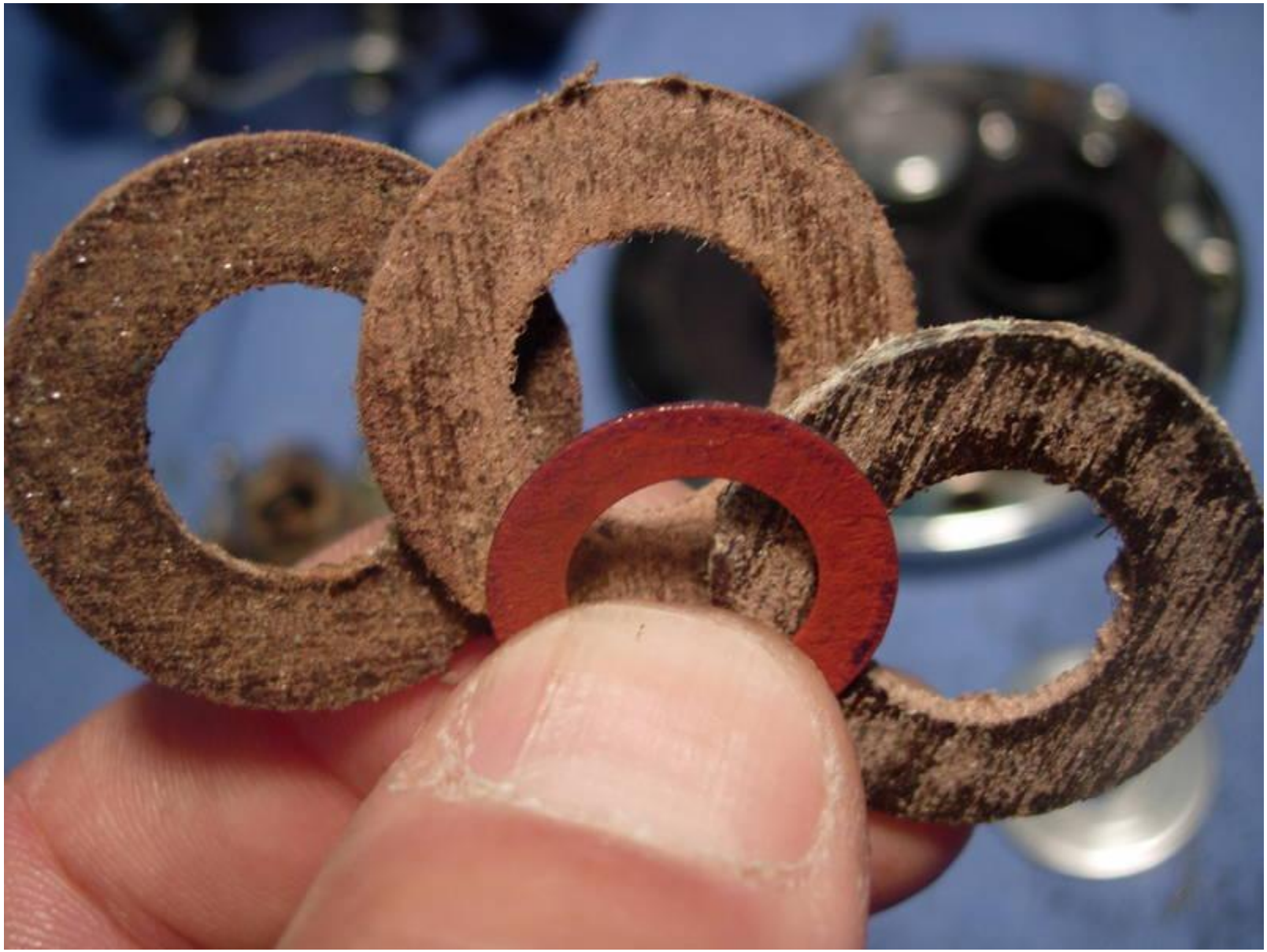


the set plate assembly (key #25) will drop out as a unit.



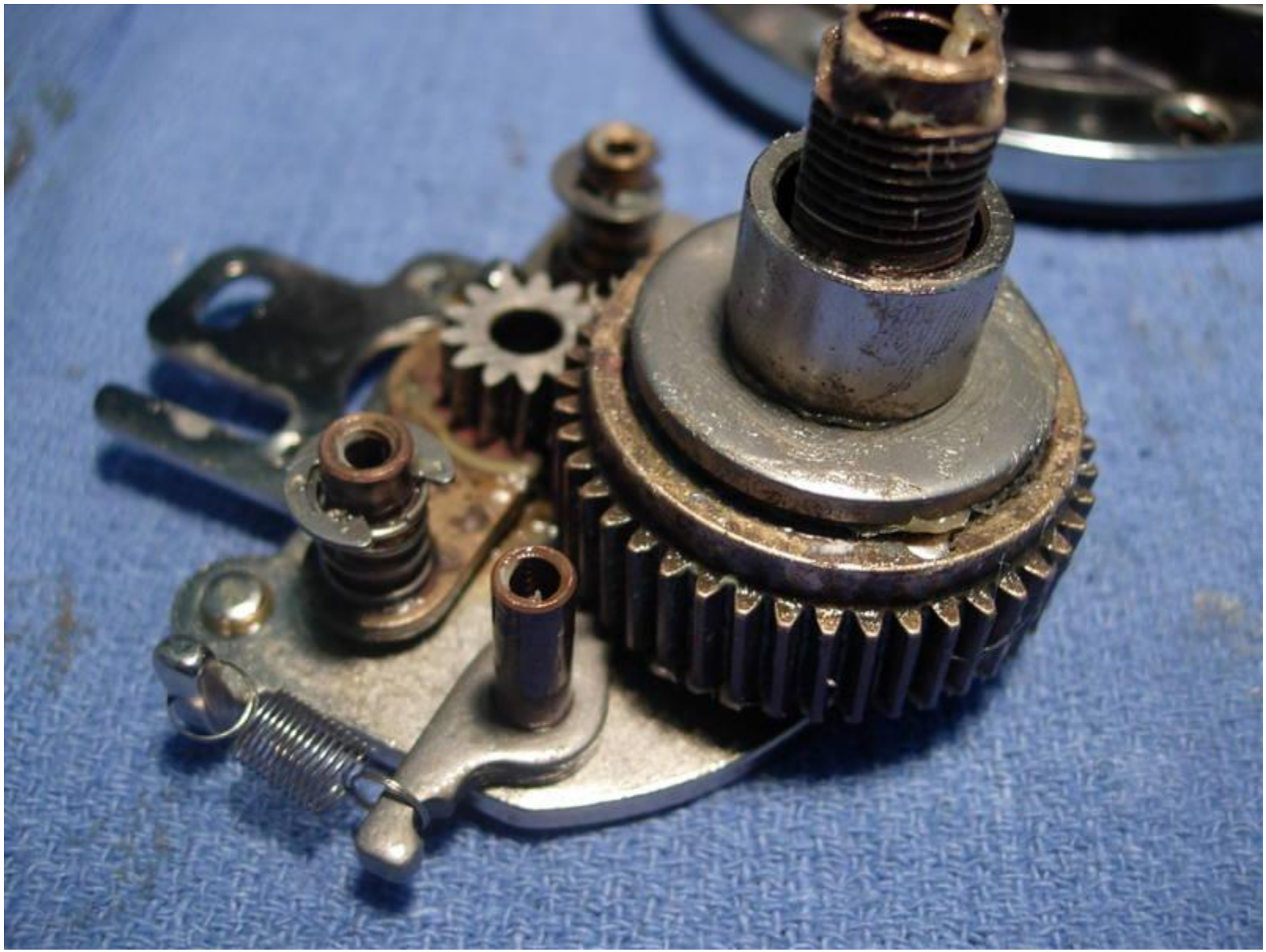
here is an exploded view of the gear cluster. the stock daiwa drag washers will be replaced with a single penn ht-100 #6-855 and a set of five penn ht-100 #6-113h's. the #6-113h drag washers are thinner that the stock daiwa drag washers and will be doubled up to maintain the proper height.

we will be very happy to be replacing these particle board drag washers with penn drag washers.

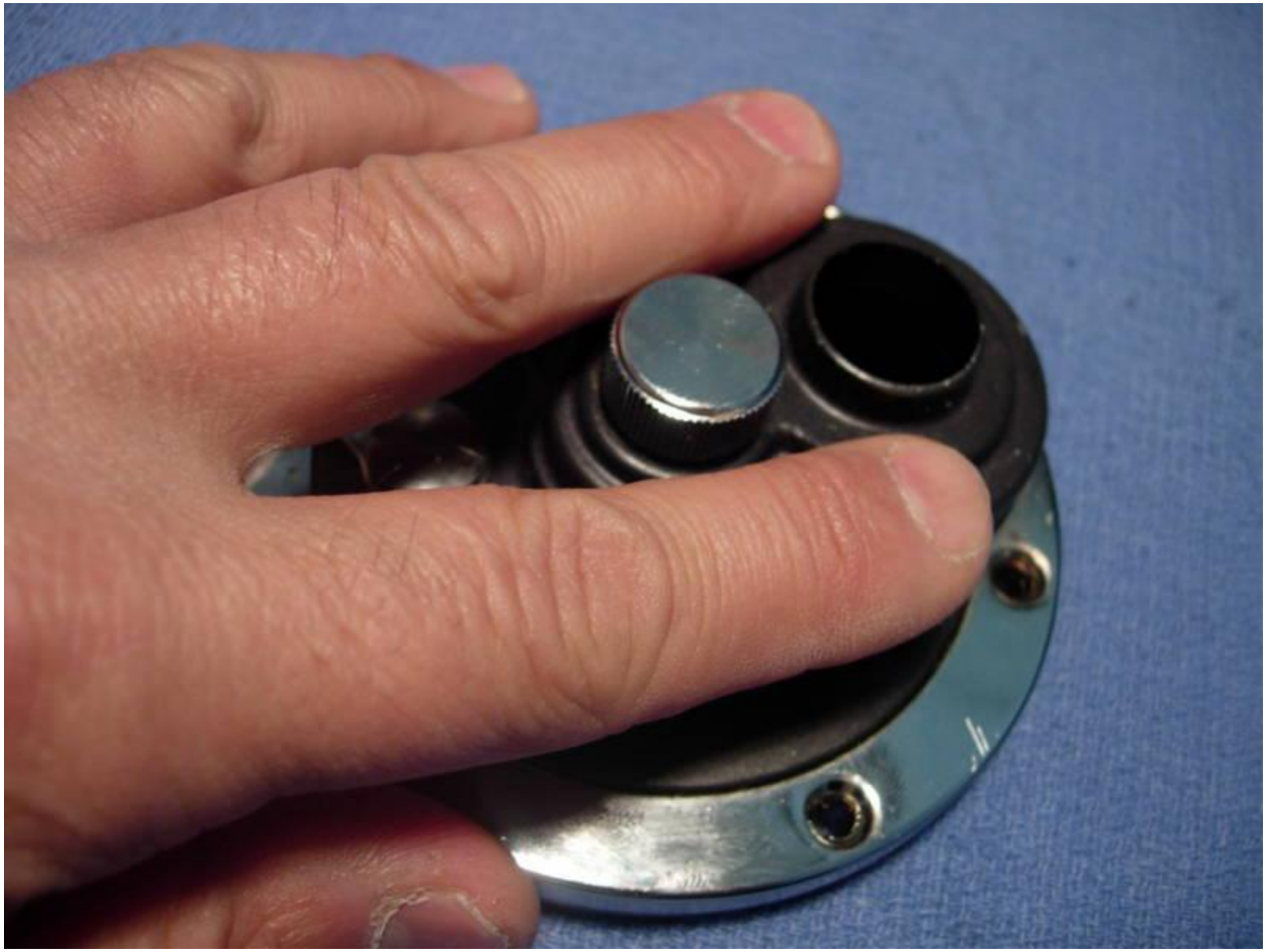


slap a nice, thick, juice coat of cal's drag grease on the drag washers. don't worry about the excess. it will just squeeze out the sides.

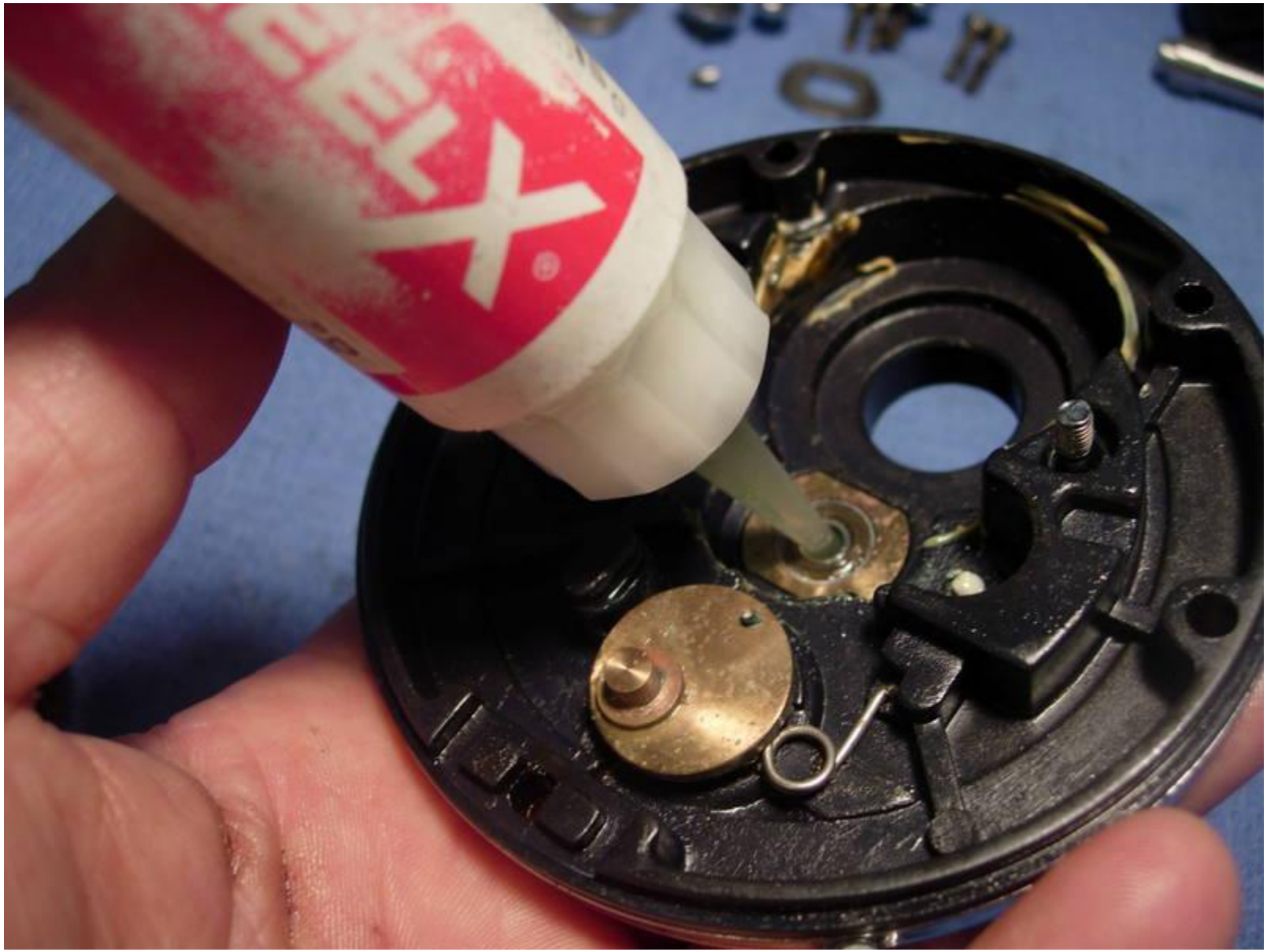
rebuild the drag stack, including the spacing sleeve (key #55).



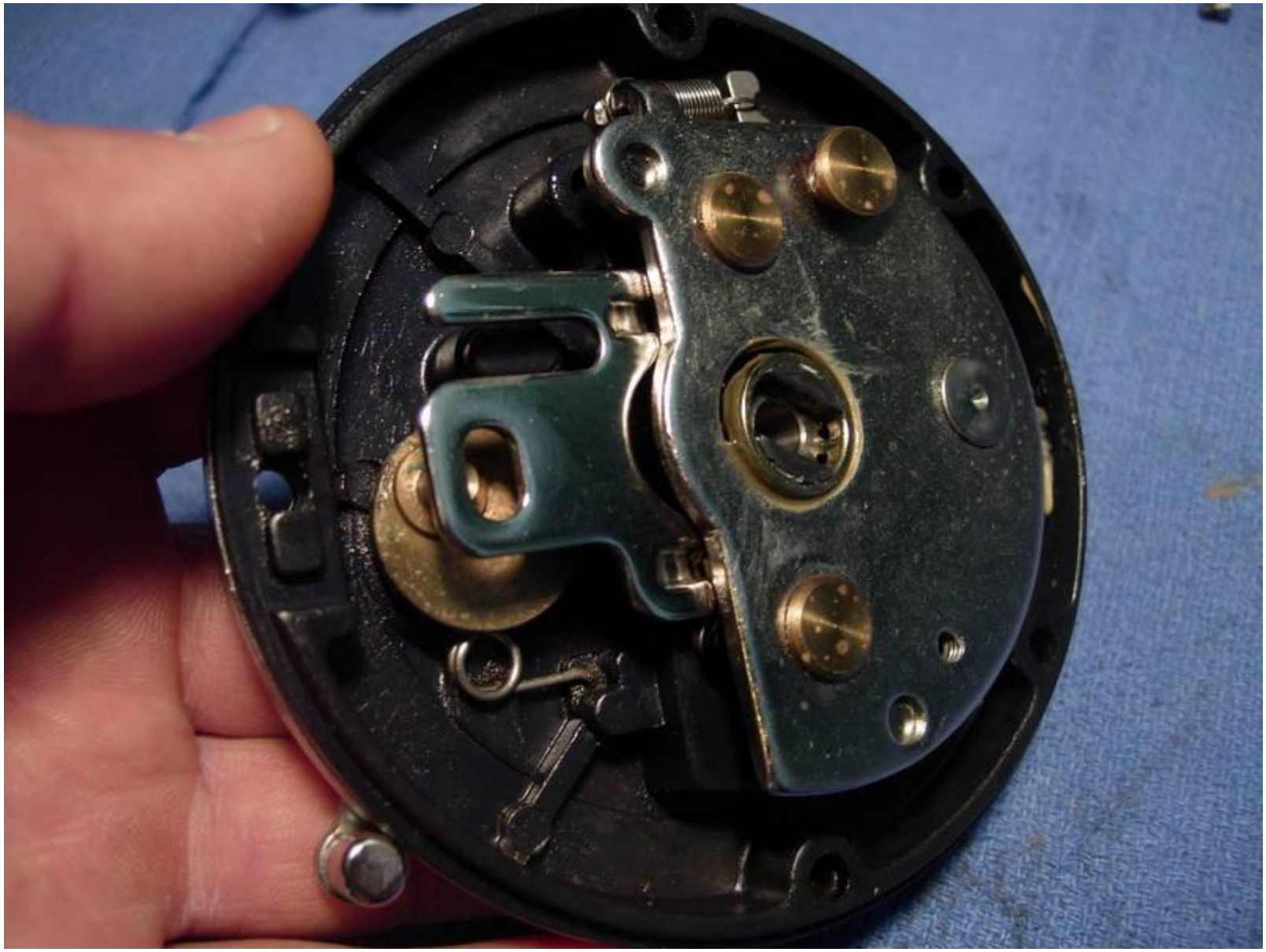
replace the set plate screws (key #'s 42 and 63), place two fingers over the screws and flip over the side plate (key #36).



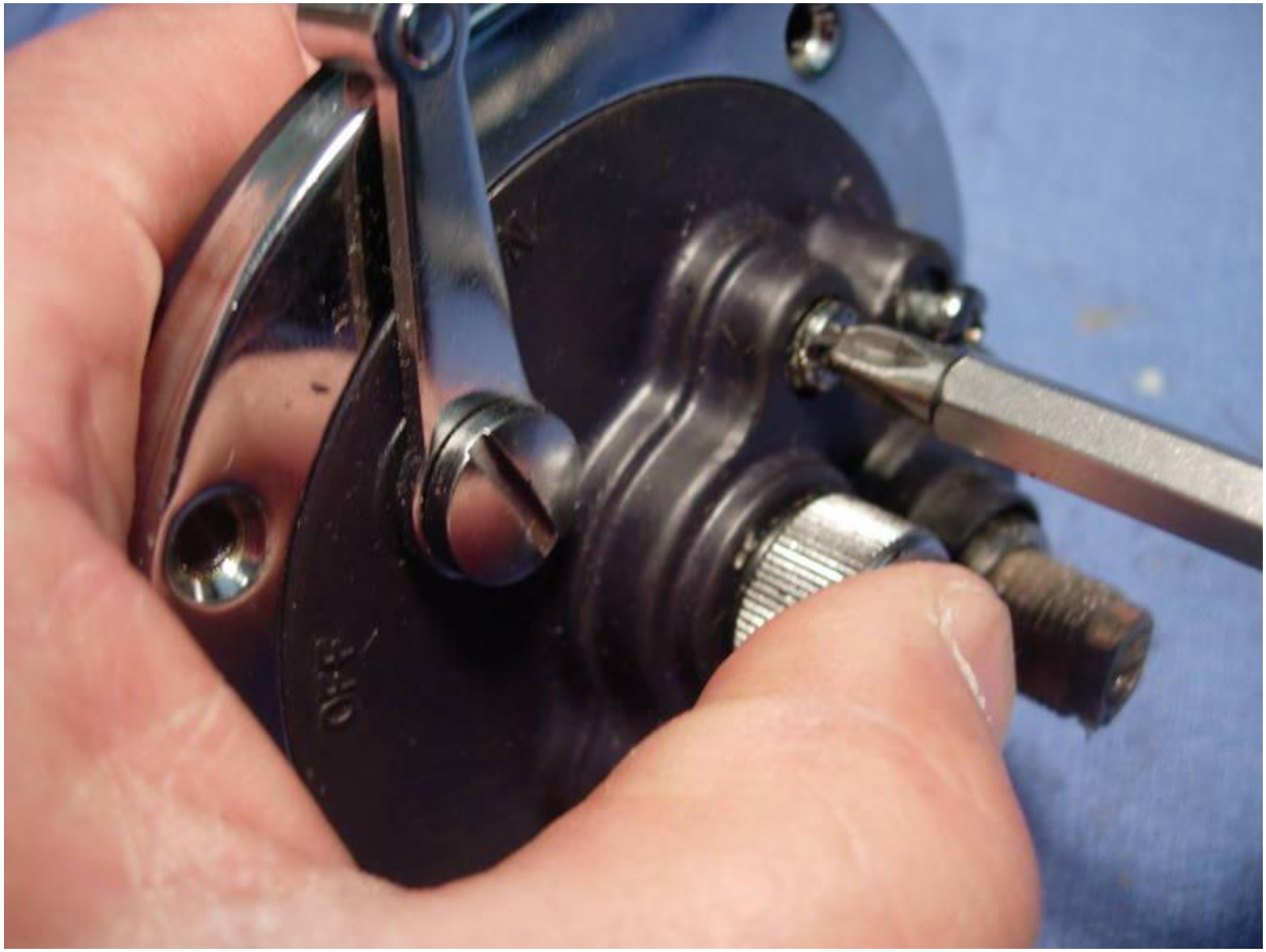
lube the right side plate bearing (key #36).



carefully align the set plate assembly (key #25) onto the right side plate (key #36).



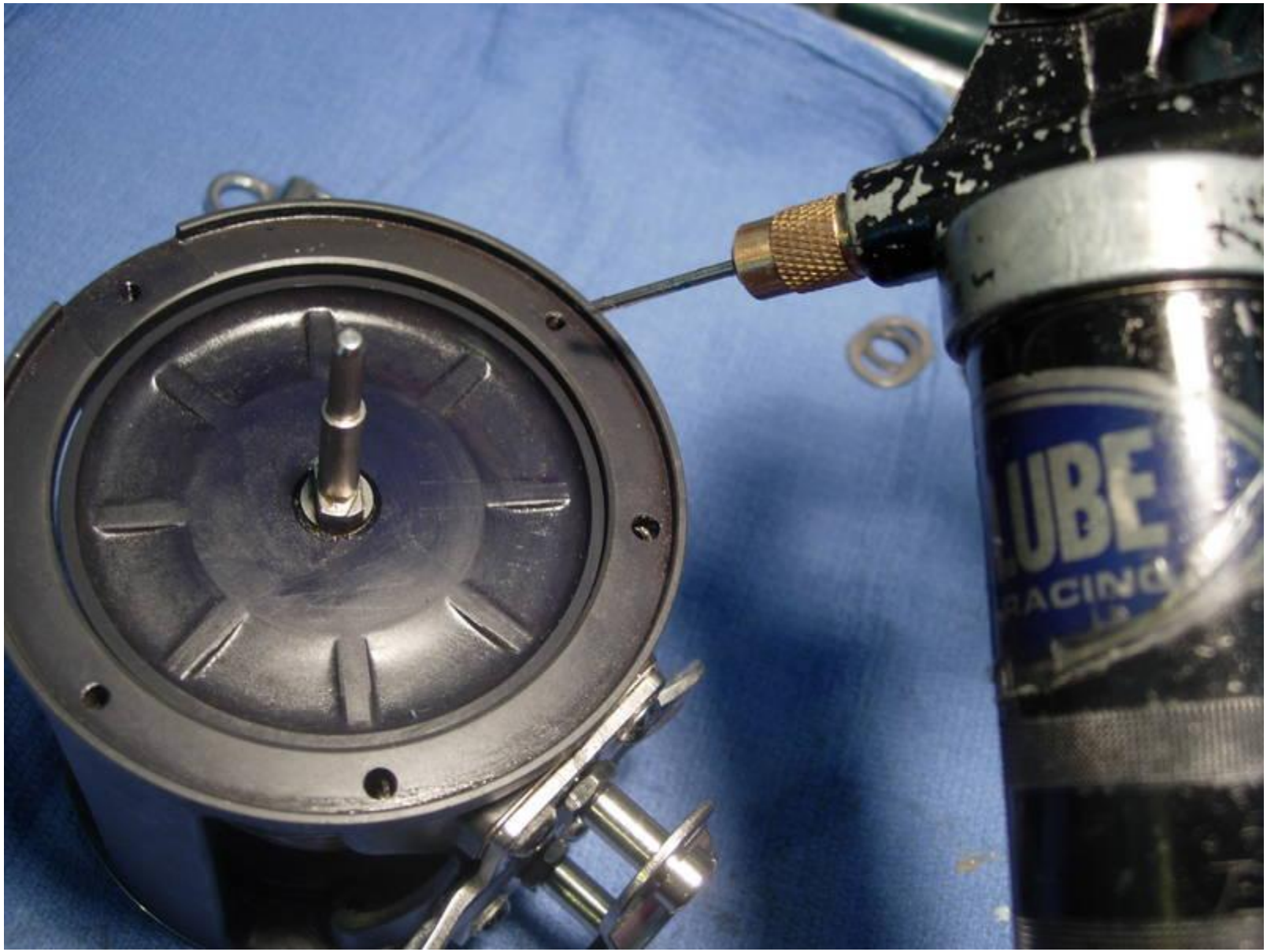
with a right hand assist, flip over the right side plate assembly (key #36) and tighten down the set plate screws (key #'s 42 and 63).



make sure the anti-reverse mechanism is functioning properly.

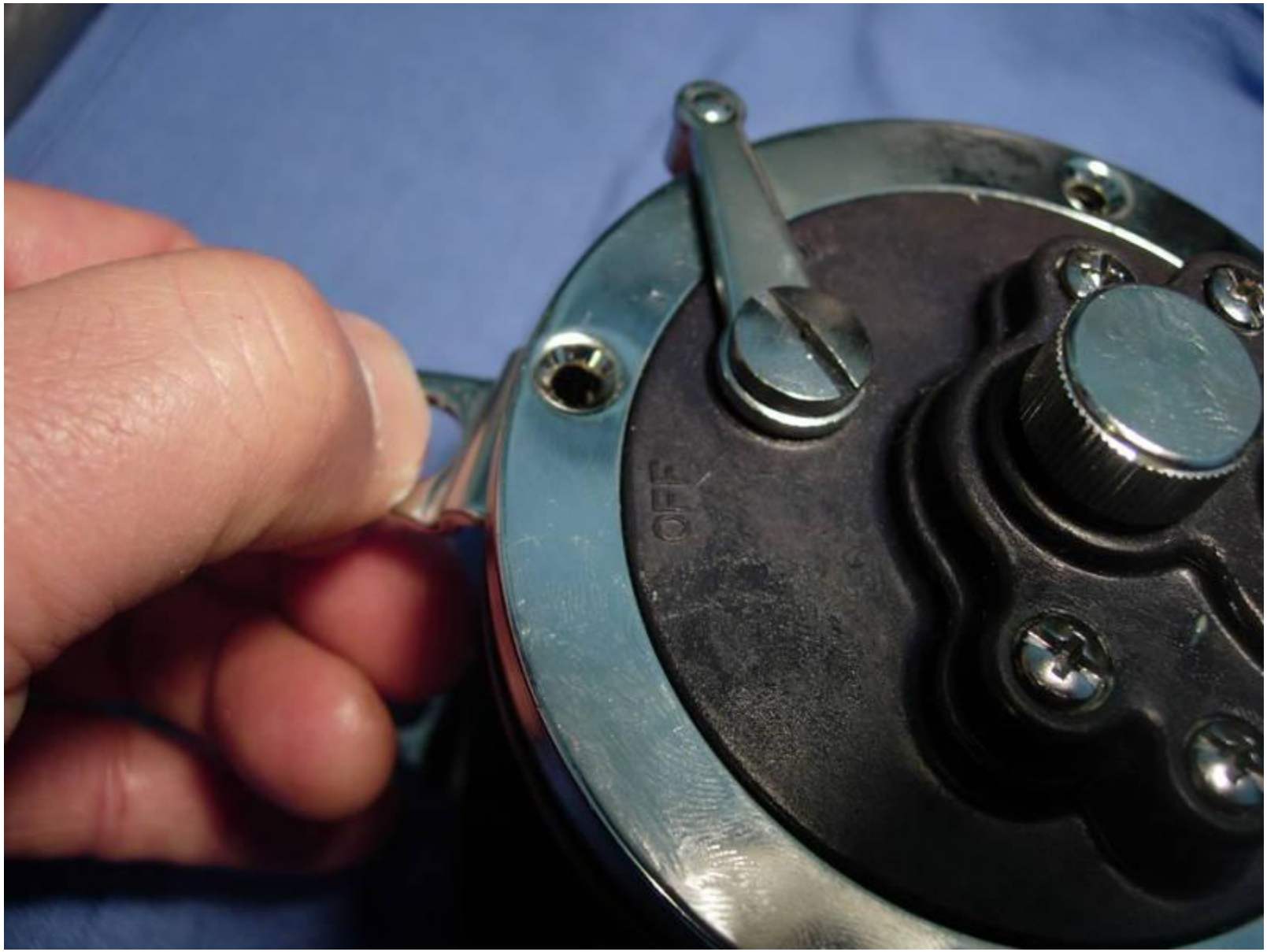
make sure the clutch lever (key #39) is functioning properly.

grease the screw holes on the right side of the frame (key #16).

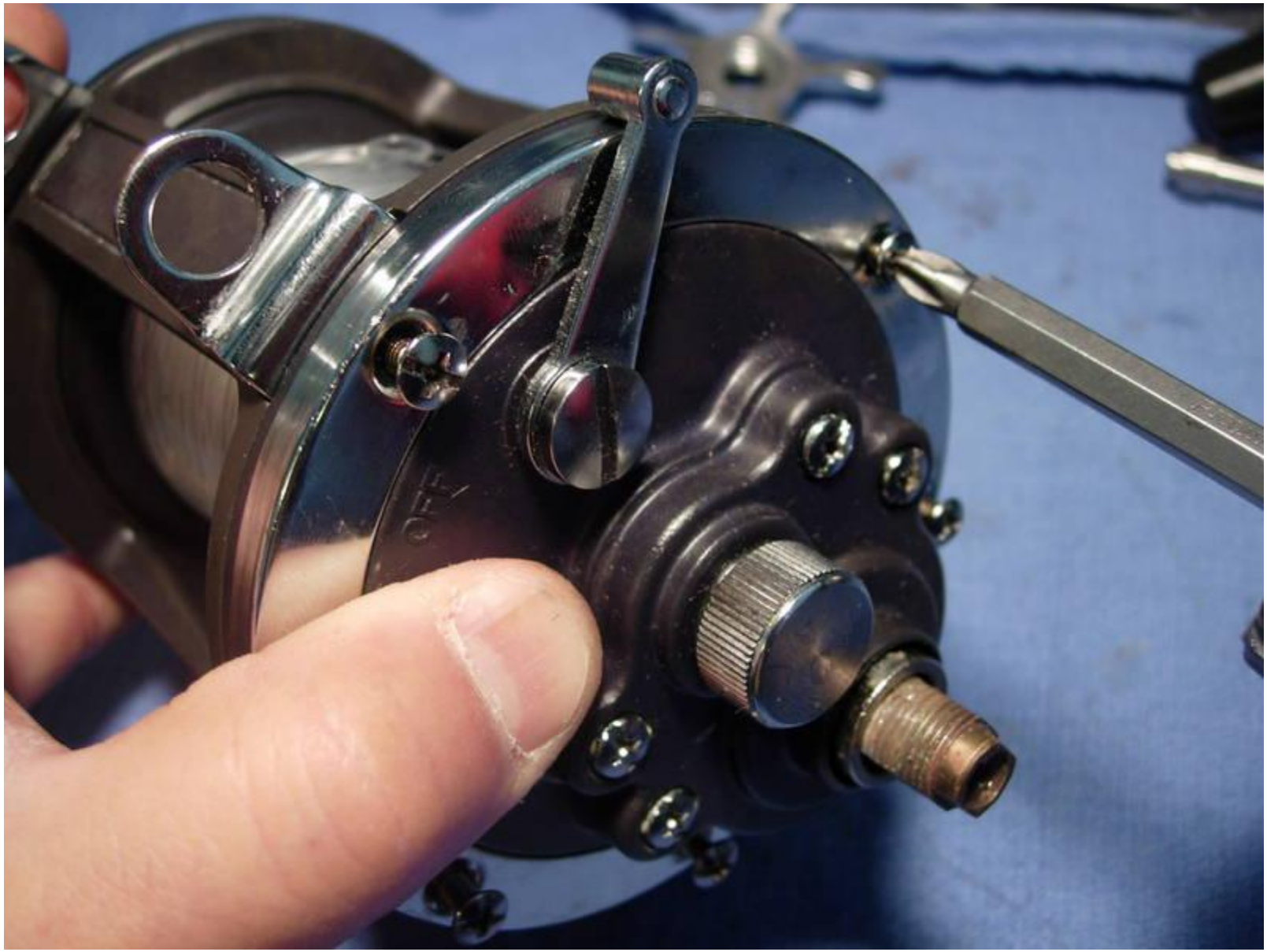


install the harness lug (key #18) and hold it in place.

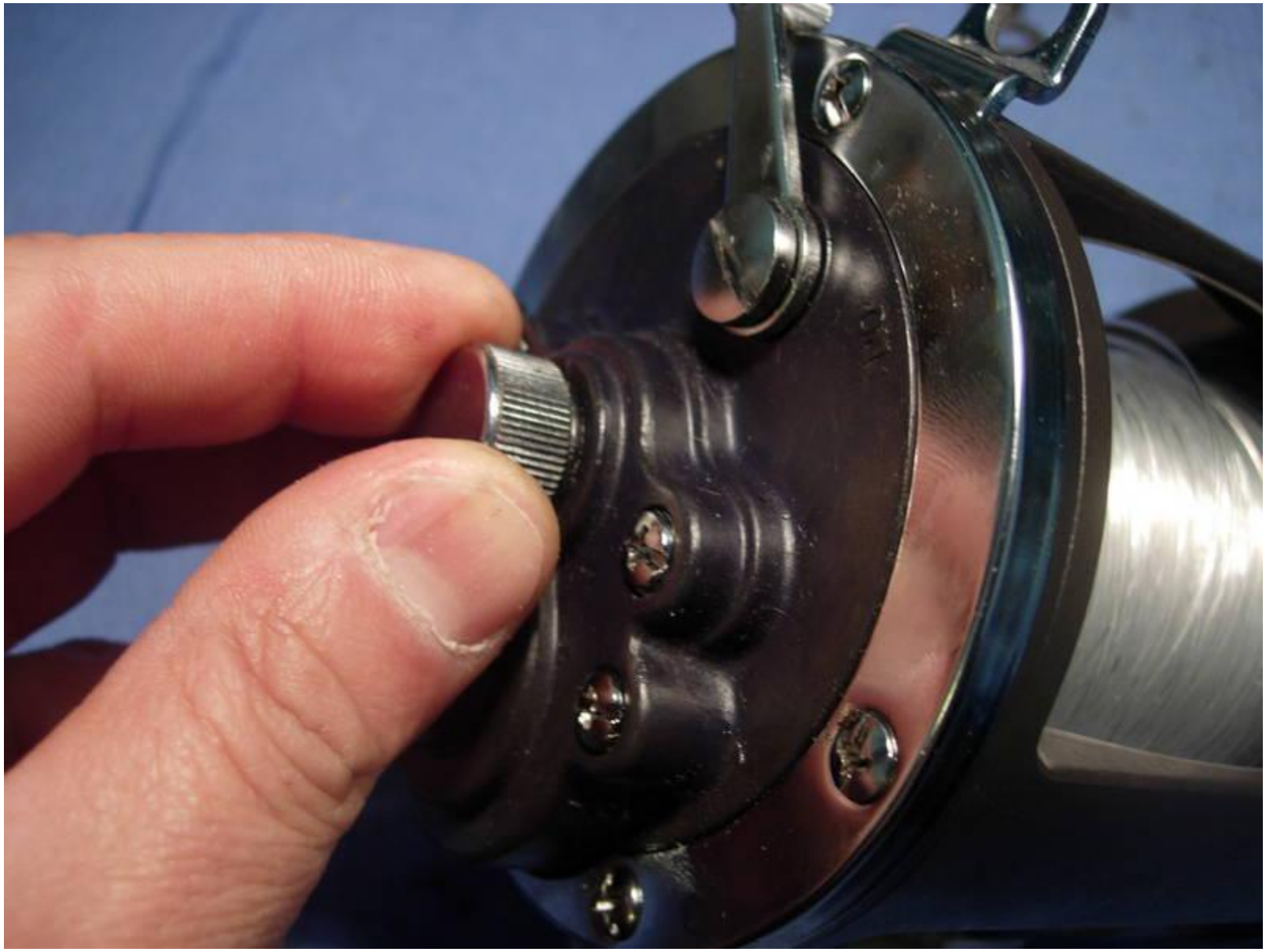
install the right side plate assembly (key #36).



install the right side plate screws (key #'s 48 and 49), long ones on the bottom!



adjust the spool adjusting cap (key #46) until there is zero load and zero free-play.



give the spool a spin. let's hope you don't have to replace any bearings. they might not be easy to remove.

install the tension springs (key #56) in a "()" orientation.

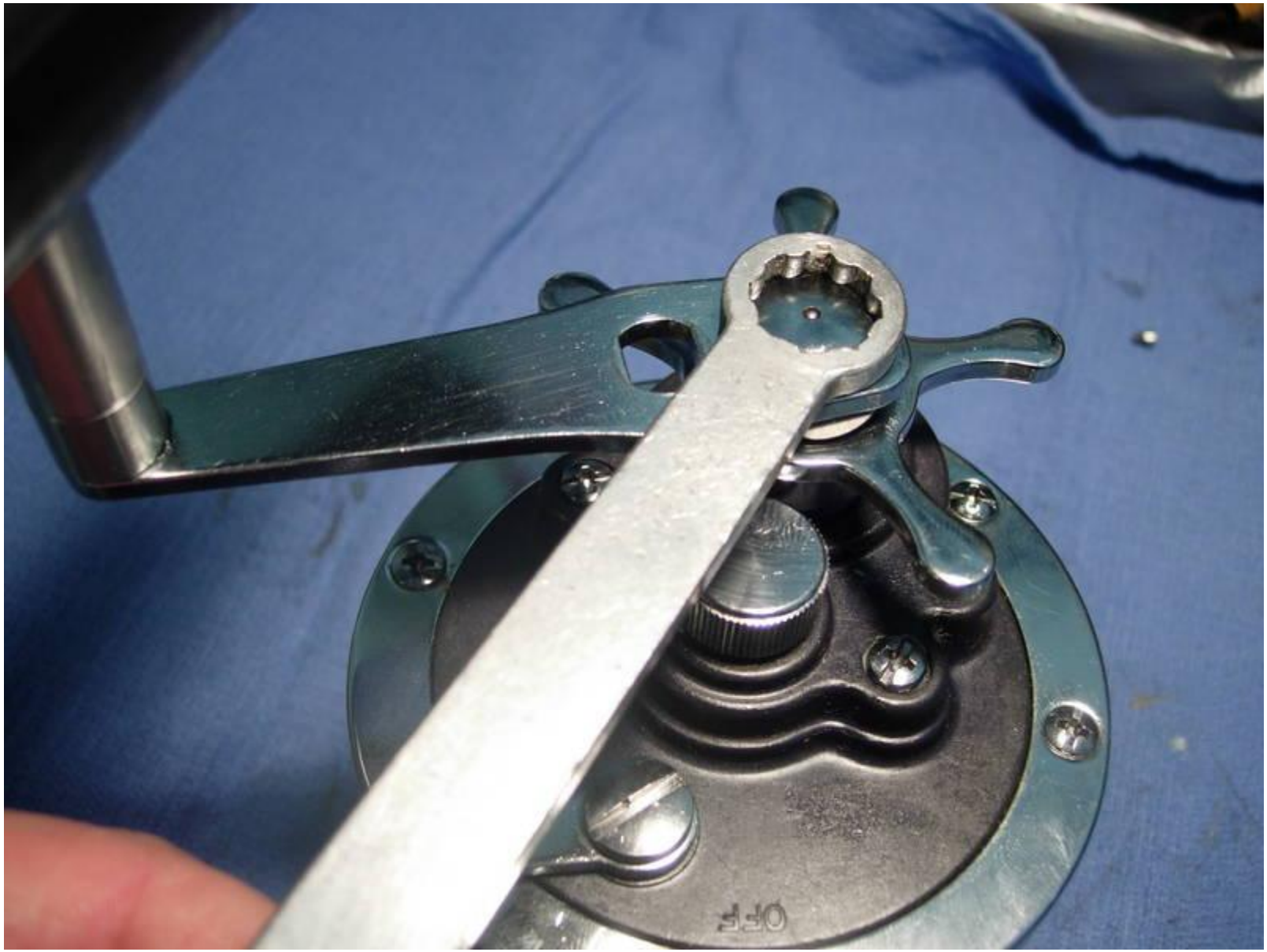
install the star drag (key #57). turn it down until it won't turn any more. you should be clear of the shoulder of the set plate drive shaft and still be able to turn the star without banging into the spool adjusting cap (key #46).

install the handle washer (key #58).

at this point, we're going to install a new handle grip. I'll drill out the back of the rivet for the old grip, then remove the grip and throw it away. I'll need the arm only.

this is the latest prototype. it has a 9 degree offset and is over an inch in diameter. it is huge compared to the stock grip on the right. i've had a few guys tell me that it looks too big. my response has been that they are not catching big enough fish!

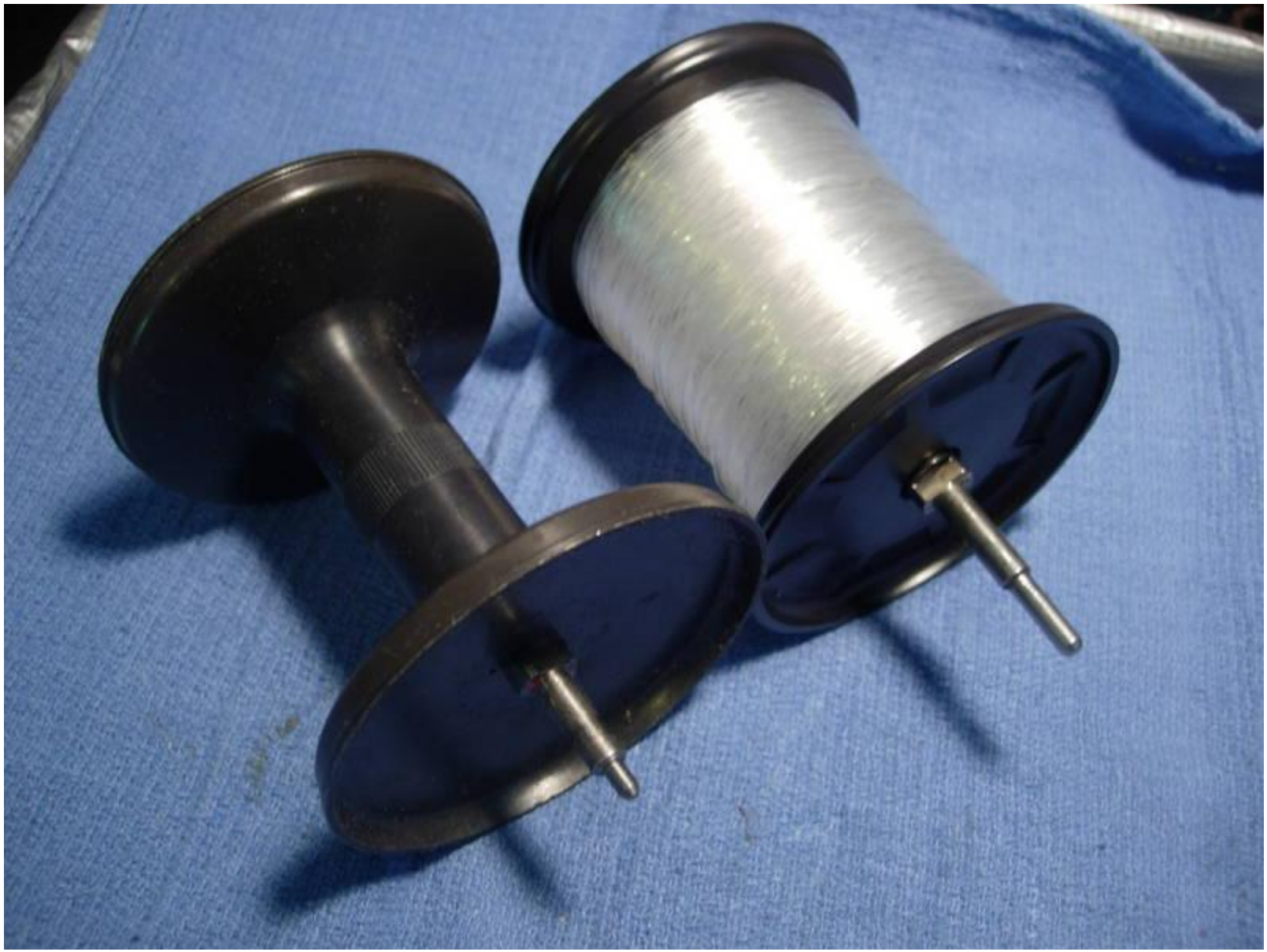
install the new handle (key #59) and handle screw (key #60).



install the handle lock screw (key #61).

done!

now, for a few comments..... the sealine 450H is a real diamond in the rough. let's compare daiwa sealine 450h to the 4/0 penn 113hlw. the spool size of the daiwa sealine 450h on the right hand side is about the same size as the wide spool 4/0 penn senator 113hlw.



the drag range is also about the same. with greased carbon fiber drag washers, the functional drag range for both reels is 10-20#'s with an absolute maximum drag of about 25#'s. because of the risk of damage to the main gears, i would recommend keeping the drag below 20#'s. once you change out the drags, the performance of the two reels is identical. the main advantage of the daiwa sealine 450h is the aluminum frame. a similar upgrade for the penn is $80 for the frame alone. the daiwa sealine 450h is available for $120, the penn 113hlw is available for $130. with a $10 drag washer upgrade, you can have an all aluminum "4/0 wide" daiwa that will perform as well as a penn. honestly, the performance of the two reels will be identical, but because of the all aluminum frame, i will vote for the daiwa sealine 450h to edge out the penn 113hlw as the best in its class.