Final Drive maintenance Part 3 Lube and Install

Last part we got all the stuff cleaned up, o rings changed out and final drive fluid changed. So this part we're gonna slop the grease to her. Looks like there is gonna be a Part 4 just couldn't get it all in here. Keep in mind these are my methods and fluids I'm using as my preference you may use others and do things a little differently, I'm just trying to show others the procedure I use. Thanks



(left) Got it all clean, checked bearings and replaced O ring.

(right) I cover it good with a coat of Bel Ray Assembly lube.



(left) Set the plastic thrust washer on the greased area

(right) Slop some more lube on er



(left) little more on the drive flange that sets on top

(right) There are varying opinions of whether or not to put anything on the dampener studs? I just apply a light coating of lube to them.



(left) Cover the splines with the lube

(right) Then the mating part the drive flange splines will go into. I put it in here pretty good. I was always told grease is cheaper than metal?



(left) using on the final drive splines

(right) For the pinion cup and driveshaft I use this. I get it at Tractor Supply and have been using it for years. It's great molly grease that really sticks to metal.



(left) Cover the area the pinion cup goes into and clean the threads on the mounting studs. If your using an air wire wheel it will take that rag away from you and wind it up.

(right) Blow everything out good with air and I use a drop of blue serviceable loctite on the pinion cup stud before I slide the pinion cup on.



(left) Then slide the pinion cup over the stud

(right) Put the nut back on and hit it with the impact. Don't need to hammer on it to hard with the impact but tight. Then put some grease around the top of the splines no need to put grease all the way down it will push down there when the shaft is installed. We don't want to plug those holes up in the bottom so we have to be careful how we apply the grease here.



 $(left)\ {\rm Next}\ lube\ the\ {\rm splines}\ on\ the\ driveshaft\ with\ the\ 3\%\ moly\ grease.$

(right) Don't put any on the end of the shaft just the splines. Putting on the end will risk plugging those holes in the pinion cup. It will get grease on it when it gets slid together. Put a little grease on the splines at the other end of the driveshaft also, the end that goes into the u joint.



(left) Slide the 2 pieces together

(right) Make sure you put the u joint in and hook it to the output shaft on the motor. I use some moly grease on both ends of the splines.



(left) Slide the final drive/ shaft up into the driveshaft tube.

(right) You'll probably get about to this point and it will stop.



(left) put drive flange into the final drive and turn it back and forth quickly while working trying to get the final drive and driveshaft tube to come together. What is happening is the u joint is lying down against the bottom of the tube and you are jabbing the driveshaft at it trying to get the hole and splines to all line up.

(right) after it comes together start the 4 nuts on the final drive studs. Just finger tight don't tighten them yet.



(left) Be sure you put the spacer back in and the small end to the bottom of the hole

(right) Put the flange back into the dampeners and roll the wheel to the bike.



(left) Raise the bike high enough to get the wheel under the fender.

(right) Then lower the bike till the splines line up. Make sure you keep the wheel going evenly as you push it onto the final drive. If you try putting it on at an angle you risk cutting or damaging that 3rd elusive o ring you hear about. So go easy and evenly.



(left) I use a pry bar to help the wheel slide over evenly onto the final drive splines

(right) Then lightly grease the axle and slide it thru from the right side. Leave about 6" sticking out.



(left) Lightly grease just the end and about 1/8" of the left side of this spacer.

(right) Apply some grease to the seal



(left) Push the spacer into the seal. Now you see the reason for putting the grease just on a little bit of the end?

(right) I use a pair of clamp style vise grips to compress the brake pistons back. I just slide the 2 pads together and squeeze them both to compress the pistons.



(left) Then separate the pads and slide the caliper down over the rotor

(right) Bring the part down that goes on the axle and push the axle the rest of the way through.



(left) Push the other hole in the caliper bracket up to the slide bolt that goes on through the swing arm.

(right) Torque the axle to 81 ft. Lbs.



Tighten the brake slide bolt