

A few tips for installing the seals. Please read fully.

- 1) Always lubricate the V-notch part of the seal (the part that rides on the shaft) with grease before installing it. Fill the V-notch with grease since, if the seal is doing what it's suppose to, that may be the only lubrication it gets.
- 2) Carefully slide the seal over the shaft. It is very important that the inner seal lip doesn't get folded over and/or the spring that loads the seal doesn't pop off. You may need to tilt the seal to one side to get the lip started. Also, a small blade screwdriver can help guide the lip but make sure the tip doesn't have a sharp edge. Other plastic utensils that are smooth on the edge will work as well or better.
- 3) Do not drive the output gear seal (the brown one) too deep. It is only suppose to sit flush with the housing. Driving it too deep will cause it to rub against the retainer nut and will ruin it.
- 4) Always drive the seal from the outer edges. Use a seal driver if you have it or something soft like a wooden dowel.
- 5) A little (I said a LITTLE) gasket goop on the outside rim of the seal will help to make sure it doesn't leak there. Smooth it out thin with your finger. It doesn't take much.
- 6) When reinstalling the secondary drive, it helps tremendously to remove the drive gear housing (the round cast iron part protruding from the drive removes with 2 - 10mm head bolts). This allows you to make sure that the motor-side seal goes up on the output shaft properly. After you get a couple of bolts in the secondary, you can install the housing making sure to put the shims back in place exactly as they came out.
- 7) It is easier to remove the drive gear housing (from #6) if you do it before taking the secondary off the motor. Take out the bolts that go through the housing first and then the 2 - 10mm head bolts that hold it on and the cam-dog spring will push it out for you.
- 8) When reinstalling the drive gear housing, always tighten the bolts a little at a time back and forth to prevent binding of the housing in its bore.
- 9) Use a torque wrench if you can.
- 10) Look at the bolts, if you see any signs of severe corrosion or stress, replace them. There have been a couple of cases where a bolt broke off and had to be dug out. It is best to loosen all of the bolts a little first then start loosening them and taking them out. If you loosen and take out one bolt at a time (leaving the others fully tightened) there is a lot of stress put on the last couple of bolts and might cause them to break.
- 11) The driveshaft can be moved back far enough to clear the splines by removing the three bolts that hold the final drive to the swingarm and rolling the final and wheel together back as far as possible.
- 12) Be careful reinstalling the driveshaft into the driven gear. If you are not careful, you can mess up your brand new seal. Get an extra set of hands if needed.

There's probably more but this is all I can think of at the moment.

Have fun and good luck.

Tracy