Fork Mod - Progressive Spring and Fork Drain and Fill

- GreenBarn - Sr. Member VDR

EDITOR NOTE: This is for a Drifter 800, but would be the same for the 1500. EXCEPT: the 1500 hold more oil. LEVELS are determined from the top of the tube with the fork fully compressed and no spring. Also the oem spring for the 800 is about 10mm longer than the oem spring for the 1500. Keep that in mind when determining preload, if you use the Progressive spring for the 1500 in the 800.

<table>
<thead>
<tr>
<th>Model</th>
<th>Viscosity</th>
<th>Level</th>
<th>Volume - Dry</th>
<th>Volume - Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>800</td>
<td>SAE 10W</td>
<td>280mm +/− 2mm</td>
<td>320 +/− 4ml</td>
<td>~ 270ml</td>
</tr>
<tr>
<td>1500</td>
<td>SAE 10w-20</td>
<td>169 +/−2mm</td>
<td>419 +/− 2.5mL</td>
<td>~ 356mL</td>
</tr>
</tbody>
</table>

I installed Progressive springs and changed the oil. I chose to take the fork legs off the bike for this project, due the suggestion of Chief and Troll. I'm glad I did - it was much easier with them off than it would have been on the bike. Removing the fork legs was a much easier project than I anticipated. It’s hard to say exactly how much time it took, but I’d estimate between 2 1/4 hour to 3 hours spent actually doing the work. Of course what better time is there to clean that stuff when it's OFF (man that WWW looks good NOW!) so extra time for cleaning. Extra time also for allowing the fork legs to drain in the middle. I did all this in one day.

DISCLAIMER: I think this project is simple enough for most people with basic mechanical skills. However, I work on cars every day, so I might take this for granted. It is critical that this work is done properly for your safety. Only you can judge if you have the technical knowledge and skill to complete this project.

Materials List:
1 Progressive Spring kit
at least 1 quart of "fork oil" of your choice
at least 1 quart of some oil for flushing the shocks (can be your "fork oil" of choice, or other)

Kawasaki specifies 10w SAE fork oil. Troll and many others recommend using DEX III ATF, but I ended up using AW-32 hydraulic oil (SAE 10w). This is also recommended on several other forums, and I happened to already have about 6 gallons of it. We’ll see how it acts.

I used Progressive Spring part no. 11-1145. This is the part specified by Progressive for the Drifter 1500. They do not have a listing for the Drifter 800, but they specify a slightly lighter spring (11-1126) for the Vulcan Classic 800. I chose the heavier spring for a couple of reasons. 1) Chief recommended it 2) I prefer stiffer rides on other vehicles 3) one of the issues I've had with the stock setup is too much travel / bottoming. Time will tell if I made the right choice.
Start off of course by jacking the bike up, strapping it down GOOD and making sure it's STABLE. You will be taking a lot of weight off the front, so make sure it's stable. I had to add an extra strap at the front of the bike to keep it from tipping back. I strapped it from the crash bar to the jack, something like this.

The first thing I did was take off the windshield. After doing it, I'm not positive it has to come off, but I think it's much easier to work on with it off. Mine has 4 bolts, 2 on each side:

Next, remove the front brake caliper. Remove the two phillips screws and take off the caliper. I didn't take a pic of my caliper, but found this on google. Mine isn't chrome, but you get the idea. Two bolts to remove the caliper.

Next take off the front wheel. Disconnect the speedo cable first (it just screws off). Then take off the axle nut, on the left side. Then the axle clamp bolt (allen bolt – red circle) then the axle bolt (yellow circle) just slides out the right side. You have to support the wheel when you do this. One thing to note, all of my allen head bolts have stainless screw-covers in them from the PO. These just pop out. Most of them are still in for the pics. Mine also has axle bolt covers (shown) which are held on by tiny allen screws.
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The axle bolt is under the cover shown (yellow circle). Also note 1500's after 2000 don't have speedo cables.

Take off the fender. 3 bolts each side.

Now you're ready to take the fork legs off. Loosen the upper and lower triple-tree clamps. Not necessary to take these bolts completely out.

Now the fork leg can be pulled/ wiggled out the bottom (red arrow). Remove the chrome cover (yellow arrow) when you get it out.

The next bit of work is done at the bench. Either put the fork leg in a vice (EASY NOW, don't ding it up- just enough to hold it) or have someone help you by holding it. Take off the chrome cap off the top of the shock.

http://www.vulcandrifteriders.com/forkspringpg1.html
Next, push down on the indented cap with a large Phillips screwdriver and pick out the little snap ring out of the groove. BE CAREFUL! This is under slight spring pressure and will pop out when you release. You might be able to do this by yourself, but a helper might be handy.

Take out the snap-ring, the cap, the pre-load spacer, and the washer (on top of the spring). I always try to put my parts on the bench in an orderly fashion, so I remember how they go back in. I also labeled parts from each leg (R & L) to keep them straight.

Dump out the old oil. As you can see, this one needed changed. Pump the shock a few times to get all the oil out. This is when I put about a cup of oil in the shock, and pumped it several times, and dumped it out in order to flush all the crud out of the shock. I did this several times until I got clean.
Pull the spring up and let it drain a bit. Shown holding the spring in place is the pic I used to take out the snap-ring.

You can use the Fork Oil you plan to use to charge the fork, or you could use a cheaper oil since you’re just flushing. I would rinse at least one time with the oil you plan to use, to make sure you get all the “flush” oil out. I have plenty of hydraulic oil, which I used. I then left the shocks upside down in a drain pan for a few hours to drain…. good time to go clean up the fender, tire and wheel, etc., while they are off.