K75 Fork Tuning

By Scott Conary
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As you all know all too well, I've been tinkering with by bike to solve some handling problems. And mostly playing with the forks.

I had a headshake that was present in straight line riding as well as with the bike leaned over. The bike 'developed' a rhythmic bouncing in the front end at certain speeds. There was also an intermittent knock in the left fork.

What was done: New Steering head bearings, new front tire, rear shock re-build, swing-arm bearings, new fork tubes, new damper piston collars, second new front tire, multiple tear downs of the forks, new rear brake pads and retaining pins, cut down fork preload spacer, and so on. New fork springs in the near future (recommendations?).

What I've learned:

Pay close attention to the order and arrangement of parts! At the bottom of a fork slider is an aluminum spacer. One end is wider. *Put the wide end facing up.* It helps keep the damper assemblies and tubes lined up when the fork is stressed (such as under heavy braking). This in turn might minimize the scraping of the fork springs on the inside of the fork tubes. After I turned mine around to wide side up (I'd originally installed them as I'd found them), the mysterious knocking sound in the front left fork disappeared (it was not related to the valve body shimming). Yes, there is a lot of conjecture in this. But when in doubt, put it together stock.

Do not assume that who ever previously worked on the bike, dealer or not, put it back together correctly. Use the manuals.

When reassembling the forks, play close attention to the alignment of the fork sliders. Misalignment can greatly contribute to stiction. Stiction is a bad thing. With springs removed from tubes:

1. Put the sliders on the tubes, attach to the damper assemblies, but only loosely bolt on the fork brace.
2. Insert the front axle - this is to align the fork tubes.
3. Move the sliders up and down multiple times. If you put some pressure on the sliders from different angles, you will quickly see how misalignment can contribute to stiction.
4. When you've found what slider positioning feels like it produces the least amount of stiction, tighten the bolts securing them to the fork brace.
5. Give them another quick slide to check that all is well.

While you've got the springs out, measure them. Mine have sagged nearly 2 inches.

Stock is 395 - 401 mm. Mine are down to a bit under 350 mm. There was also way too much preload for a rider of my size (PO had the dealer install a gigantic spacer). Sag was a bit less than an inch, not the 1 3/4" or so that would be desired. (about 1/3rd total suspension travel)

To measure sag - With bike upright on its tires and unsupported by a stand....

1. Push down on front end, release gently. Measure top of slider to some static point such as lower triple clamp.
2. Pull up on front end, release gently. Make same measurement.

The difference between those two measurements is fork stiction. Around 1 cm and less is desirable. Take the average of the two, call it measurement 'X' Get on bike. With feet up on pegs (might need helper)....

3. Push down on front end, release. Measure.
4. Pull up, release. Measure.

Again, the difference is a measure of the stiction. Take the average of the two, call it measurement 'Y'

Sag = X minus Y. Sag should be about 1/3rd of total front end travel (total travel was listed in my owner's manual)

If you're alone and without helper, you can use a zip-tie around a fork tube to measure how far the slider moved up the tube (obviously skewed in the push down test). Sag/Preload on an old K can be adjusted by altering the size of the spacer that sits on top of the springs. (hmmm....someone just mentioned that there's an article on this in a recent issue of MCN. Would've helped a few months ago....:))))

I won't buy another Metz 33.

While she does need new springs, she's feeling better than ever. I'm falling in love with her all over again. :) Stable in turns, in a line, and more supple on the bumps. All of the above is gleaned from fellow Prezzes, the archives, and the lessons of too many mistakes.

On the plus side, I can pull the fork springs on my K in under 10 minutes, tops. 8-)

THANK YOU to all who've helped through this saga. I'm sure I've forgotten a few bits. Hope this helps someone.

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