

BMW K1200GT (RS) Throttle Spring Relaxation,v1.0

Documented by Matt McCabe

<http://www.k12gt.com/>

Disclaimer: You bear all responsibility for the results of this procedure. No whining!

Starting with Larry Wilbers' documentation of this procedure, I decided to take some pictures to make this more "do-able" by the masses. Since I can't draw as well as Larry, I'll use some digital pictures to help me show you this procedure. In fairness, I'll admit I'm relatively mechanically minded and tend to jump into projects pretty deeply. You don't need to be a super mechanic to do this job, but you do need to be able to use small hand tools and be willing to remove/reinstall several major parts on your lovely machine.

I'm doing this job while ALL my plastic is removed for custom paint. You obviously

don't need to remove all the plastic.

However, at a minimum, you do need to remove left, right and center body panels, then remove the gas tank.

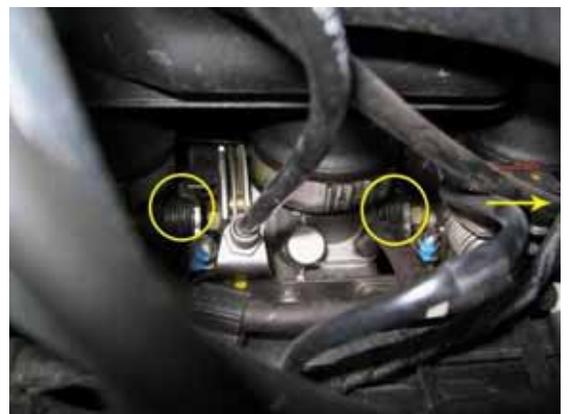


Pictured here is the left side of the engine, after gas tank removal, but prior to airbox removal. The throttle bodies and springs are located on in there somewhere. It may look scary, but don't be afraid.



After you remove the gas tank, loosen the air duct (on the right side of the bike) which inserts into the upper right part of the airbox. The airbox is attached underneath to the four (4) throttle bodies with four clamps. Loosen these clamps and then pull the airbox straight up.

On my GT, I have factory cruise control, so I have 3 springs. You may only have 2 springs. One throttle return springs is located between each of the throttle bodies. The left circle is the first spring you'll relax, then the second circle. These first two will be the easiest. Lastly, we'll relax the last spring, located just outside this picture, as the arrow points out.



The springs aren't heavily wound. What we'll be doing is moving the end from position #1 to position #2.

#1 is where the spring is really supposed to be.

#2 isn't made specifically to support the end of the spring, but it sure works out well for the job.



This is our primary tool. It is a steel fishing leader. The only one I could find had a hook already connected. Buy four or five of these things, since we'll be destroying them in this job.



Unless you want to remove a barbed hook from your hand later, I recommend you cut that sucker off right away. As a kid, I learned the hard way how to remove a hook from my skin and I didn't want to do it again.

By the way, you push the hook through the skin so the barb sticks out, you cut off the barb, then remove the remaining part of the hook by backing it out, without the barb ripping up your flesh.



Use a small vice grip pliers to hold the loop end of the leader. As you can see here, you only need an inch or two protruding from the end of the pliers.

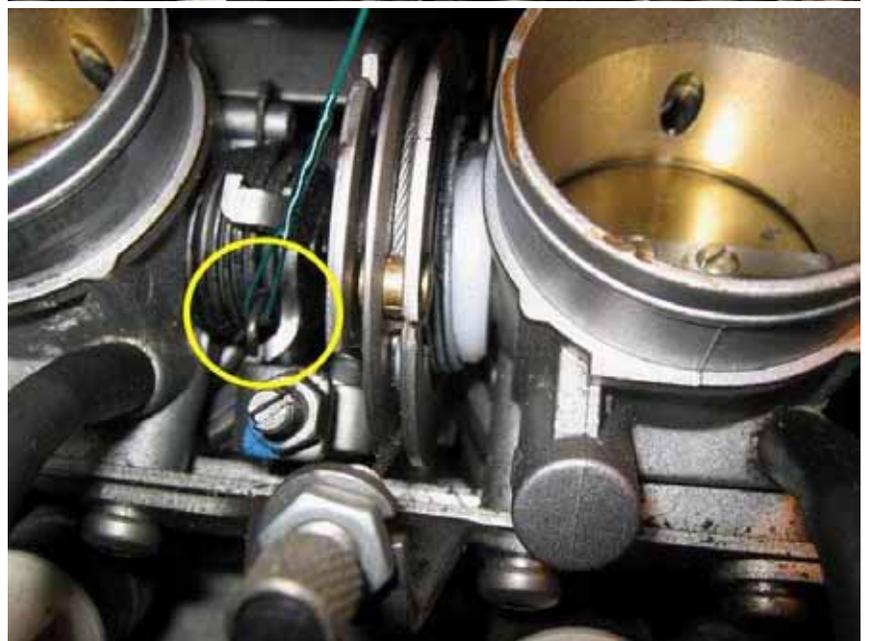


From here on out, the yellow circles (ellipse, if you prefer) will point your focus.

Reach in with the loop and hook it over the end of the spring.



Lift the spring up and around the original mount (#1 above) and let it unspring itself towards the new destination (#2 from above).



Instead of messing around with trying to remove the loop from the end of this spring, and risking knocking the end of the spring off the new position, I decided to just waste the leader by cutting the loop with a pair of dikes.



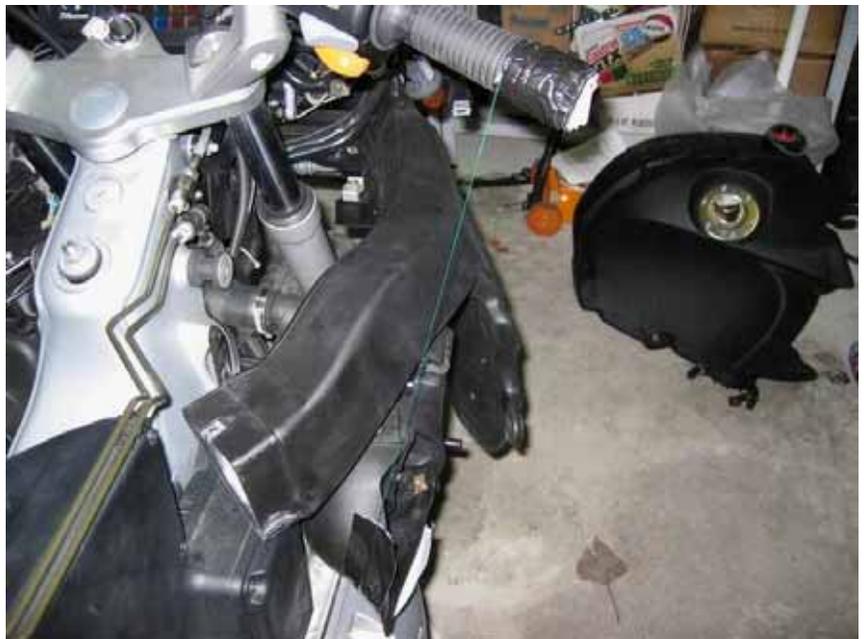
After the loop is snipped, gently remove it from under the spring. Take care to not pull the end of the spring off the mount. It looks like it would be a real pain to recover from that screw-up.



Now, repeat this procedure on the second spring. The front two springs are configured the same way.

The third spring is configured a bit differently, but it is still accessible.

At closed throttle the #1 point is harder to deal with, so you need to lock the throttle wide open. You can either use an assistant to hold it, or do what I did and just duct tape it wide open with a spare leader. Tape a couple wraps around the grip on one end, then to the right side fan shroud.



For me, this box above the last spring is slightly in the way. You may not need to disconnect it to do the job. I had to back it away so I could get a good picture of the following steps.



The last spring is accessed from below. You need to hook the loop from below, then relax the end upward on the inside to its new position.

You'll need to thread the leader loop up underneath the hoses and stuff. I taped the end to a screwdriver and attached the vice-grip pliers further away from the end as shown here.



Insert the end of the leader as shown here, up and under the hoses and such.



This bottom picture is a bit hard to see, so I stretched it out a bit. You should be able to see the green leader coming up from below. It is hooked onto the end of the spring. I found it helpful to use a long, thin screwdriver to direct the end around to its final resting place.



That's it! Put all your stuff back together and you're ready to go.

If you kill yourself or break something, don't blame me.