Front Steering Rod Maintenance / Issues



Generally speaking this is a maintenance-free part, however, there are two possible considerations that may need to be addressed.

Many or most of the Avatars that still exist out there have probably never needed specific attention paid to the ball rod-end of the steering that attaches to the front fork.

Many bikes have probably sat unused for many years. If that environment was damp, some or all of the time, there is a good possibility that the inner 'ball' of the rod-end has rusted to the custom stud on the fork. Both steels are susceptible to rust as they are made of common steel. Of course, the rod end still functions as all the movement is at the outer part of the ball against whatever material the rod-end was incorporates. My 037 bike that was Len Vreeland's back-up never had the need for the rod-end to be removed. Eventually, in deciding to replace it with a new one, I found the ball frozen to the stud and an attempt to remove it with a small puller actually pulled the outer part of the rod-end off of the ball. (there was plastic liner that served as the bearing material) The only

way to get the ball off of the stud was to carefully take a hacksaw and saw down next to the stud on both sides and it then fell off with a tap.

The rod-end had a little bit of excess play that was part of a metallic 'rattle' heard while riding. The new rod-end rattled more than ever! I have found the clearance between the top of the rod-end and the roll-pin was the real source of the rattle. We are talking small clearances here – no more than about 1/32".

I have found 2 solutions. Probably the simplest and cheapest is to use some 100% silicone seal. With the steering rod-end removed, clean the stud well (I use electrical spray cleaner) and apply a small amount of silicone to mostly the bottom circumference of the stud and allow to dry. That should allow you to push the rod-end down far enough for the 3/32" roll-pin to be installed.

The other solution is to go to the trouble of obtaining a small o-ring. I have tried both methods. I currently have an o-ring $1 \text{mm} \times 6 \text{mm}(i.d.) \times 8 \text{mm}(o.d.)$ on the bike and it is working fine but if it ever begins to rattle again, I will go back to the silicone.

