



## Refurbishing Kettle Front Forks L,M,A,B Models

The front forks on your Kettle do more than just provide something for the wheel to bolt on to; they are designed to give a bike as smooth a ride as possible over a variety of road surfaces and conditions, keeping the tyre firmly in contact with the road at all times and contribute towards its handling characteristics in association with the swing arm, rear shock absorbers, head bearings, tyres and geometry of the frame. The interaction of these elements and the various factors such as rake, castor angle, the overall frame design/construction combine with the heavyweight Kettle to result in what we know as "The Flexiflier" ..... need I say more???? If you want to know more about frame/steering geometry I suggest you research it for yourself because it's a very complicated subject and I don't intend to go over it here ..... particularly as I know very little about it!

A Kettles front suspension is typical of 1970's Japanese telescopic "Cerani" type fork design with no preload, rebound or damping adjustment such as found on modern bikes. The only way you can make changes to the dampening characteristics without stripping the forks and modifying the internal oilways in the stanchions is to use fork oil of a different viscosity, SAE10 being a lighter oil and SAE 30 thicker. The latter gives a firmer or slower moving fork action, which should make for a harder, less wallowing ride but don't expect to experience major improvements as the load you carry on your bike whether solo, two up and luggage all influence the handling characteristics. Another means of altering the fork action is to fit new less "tired" original specification fork springs or non- standard progressive springs, the action of which is described later.

There are things you can do to improve 30+ years of use, abuse and inactivity by replacing and refurbishing suspension components, but you must bear in mind that no matter what you do with original Suzuki parts you will never achieve an "armchair on rails" level of handling, it was a little hairy back in the 70's and will still be now! Common worthwhile improvements such as fitting new or progressive fork springs, aftermarket rear shock absorbers, such as Hagon plus modern matched tyres all to help take the

edge off jittery cornering and white line twitchiness. More radical modifications can include installing forks and aswingarm from more modern machinery or possibly bracing the frame for extra rigidity, but do you really want to do any of this to your standard Kettle?

### **On a safety note.....**

Everything that you do to the front suspension **must** be carried out on both fork legs and not just one. For example, changing the oil or spring, in one fork leg only will be liable to create an imbalance in compression/rebound/damping characteristics which is likely to detrimentally affect your bikes handling with the potential for an accident due to unequal fork operation!!!

Please be aware, Kettles are heavy .... very heavy ..... as if you didn't already know that ..... and if you are going to remove the front forks you will need to safely support the front end of the bike. The centrestand and a jack or better axle stand under the front of the engine/frame tubes will prevent your bike from toppling forward, potentially injuring you and damaging it! Also, the fork springs are under compression even when not fitted to your bike so whether you have the screw cap or circlip retained plug types, loosening them will cause them to pop off with some, but not tremendous force. You must bear in mind that when fitted to your bike and it is on the centrestand the fork springs are compressed further due to the weight of the machine pushing the bike forward putting more of a load on the front wheel and if you are not careful the caps might pop out with more force than you are expecting Also, a previous owner may have at some point tried to "improve" the spring rate of the forks by adding extra preload putting say an old socket or washers on top of the springs before installing the fork caps. This will of course increase the force with which the caps come loose so be careful, it is best to anticipate such factors if the history of the bike is not known to you! That said ..... more on fork cap "troubles" later. Removal of the fork caps will of course release the compression on the springs and if the front end of the bike is not adequately supported it could lurch forward and roll off the centrestand, so be careful and make sure the front end is well supported before doing anything to the forks with them still attached to the bike!

There are some tasks you can carry out without removing the forks from your bike such as changing the fork oil or checking the fork springs