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re: Shock Pre-Purchase Considerations

Total Sag

To whom it may concern,

Great motorcycle shocks are not designed and do not “work” the same way as lesser quality shocks. Buying considerations should address the length of the shock in relation with your existing stock or aftermarket poor quality shock.

How to figure out how long you want your shock:

1. Figure out the height of where you wish your bike to sit. Take in consideration that you are sitting on the bike. If appearance is the driving factor to shocks than figure the height without the rider.

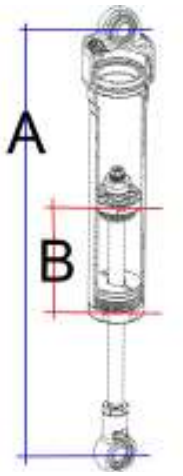
2. Remove one saddlebag if applicable and have a friend measure the eye to eye measurement being very accurate with your measurement. You are measuring Total Sag which is the total measurement between mounting bolts (eye) which

included the rider (you) and your bike. A great shock lends little consideration when adding a passenger and load as this factor is adjustable. This factor is eliminated with the introduction of spring pre-load. A great shock company make the shocks for only you.

3. If ride height change is desired:
   - Place a floor jack under the bike,
   - Remove the shocks.
   - Sit on the bike and have a friend jack up the bike and measure the total measurement between mounting bolts on the frame where the shock use to be mounted. This measurement is Total Sag.

New Factors to Consider

1. When you are at Total Sag, great shocks are designed than built for you to have 1/3 of the total stroke used for rebound. This means that not all road irregularities (bumps) are a rise, some are dips. To address this; the piston (B) is located 1/3 of the stroke inside of the cylinder. This total measurement (A) between mounting bolts (eye) is where the bike will "sit" while moving on a smooth surface as well as at rest.



   - Travel over a rise, the shock depresses up to 2/3rd of the stroke before movement of the frame, depending on the size of the bump.
   - Travel over a dip, the shock depresses up to 1/3rd of the stroke before movement of the frame, depending on the size of the dip.
   - The purpose of this technology developed for racing is to keep the tire in contact with the roadway creating traction. The byproduct is a very smooth ride.

To select the correct shock length one must consider the stroke as well as the shock length.

Sincerely,
Howard G. Messner, President