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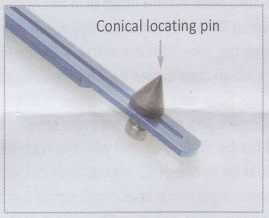
INSTRUCTIONS

Instructions for Motion Pro 08-0613 Sag Scale II

Thank you for choosing the Motion Pro Sag Scale II. The instructions below will show you how to check both the static sag and rider sag of both the front and rear suspension on virtually any motorcycle and provide basic guidelines for proper sag settings. Please refer to your motorcycle's service manual for specifications and recommending settings for your particular model.



Assembly

Flip open your Motion Pro Sag Scale II and thread the knob into the conical locating pin through the slotted area. The cone will be on the side opposite to the scale.

Rear Suspension

Place the motorcycle on a stand that allows the rear suspension to fully extend. Insert the locating cone of the sag scale in the rear axle hole (see image 1). Adjust the sag scale up or down in the slotted area until the zero point on the scale is in line with a reference point on the chassis. The seat bolt, fender bolt, or a mark from a felt pen or section of tape on the fender make good reference points (see image 2). This setting represents your maximum travel.


Image 1

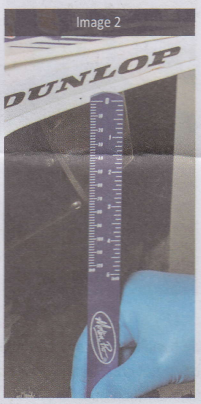


Image 2

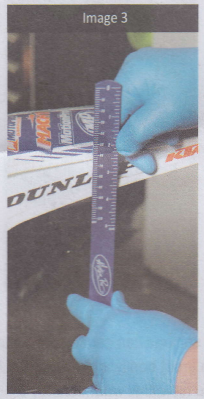


Image 3


Image 4

Note: Be sure to use the same reference point with each measurement taken. If possible, try to take your measurements with the scale perpendicular to the floor. An angled measurement is not as accurate.

2) Remove the bike from the stand, bounce the shock a few times to settle the suspension and measure with the bike under its own weight (see image 3). This is static sag. Check your service manual for static sag specifications, but your measurement should fall approximately between 25 and 35mm. If adjustments are required to achieve the proper measurement, please refer to your service manual for instructions on adjusting your spring preload.

3) To check rider sag, have someone hold the bike steady with the rider aboard in a normal riding position (feet on the pegs). Have the rider bounce up and down on the suspension several times then allow it to settle to a resting position. Using your reference point you should now see a reading somewhere in the area of 90 to 100mm (see image 4). Check your service manual for rider sag specifications. If adjustments are required to achieve the proper measurement, please refer to your service manual for instructions on adjusting your spring preload. If rider sag is less than 90mm with the correct static sag, the shock spring is probably too stiff for your riding weight. If rider sag is more than 100mm with the correct static sag, the spring is probably too soft for your riding weight. Corrections should be made, such as replacing the spring. Please refer to your service manual for recommended spring rates and servicing.

Front Suspension

1) Place the bike back on a stand that allows the front suspension to fully extend. Place the guide pin in or as close to the center of the front axle as possible. Orient the sag scale in line with the travel of the fork leg. Place a small piece of tape just below the triple clamp to use as your reference point (see image 5) if necessary and adjust the sag scale up or down in the slotted area until the zero point on the scale is in line with a reference point (see image 5b). This reference point represents your maximum travel. **Note:** Be sure to use the same reference point with each measurement taken.
2) Remove the bike from the stand, lock the front brake and depress the front suspension several times then allow it to return to a resting position (see image 6). The static sag should be 5 to 10% of the total travel (Example: 300mm travel = 15 to 30mm).
3) To check rider sag, have someone hold the bike steady with the rider aboard in a normal riding position (feet on the pegs). Lock the front brake and depress the forks several times, then allow them to return to a settled position. Using the same reference point as used for the static sag and with the rider still aboard in a normal riding position, check the measurement (see image 7). Rider sag should be between 25 and 30% of the total fork travel (300mm of fork travel should have 75 to 90mm of rider sag). Reference your service manual for specifications on fork travel for your motorcycle. If this measurement is in excess of 30% of maximum travel and the static sag is in the correct range of 5 to 10% of maximum travel, a stiffer set of fork springs would be advised. If the measurement is less than 25% of maximum travel, a softer set of springs would be recommended. Please refer to your service manual for recommended spring rates and servicing.

For any additional information in regards to this tool or any other fine Motion Pro products, please visit our website at www.MotionPro.com.


Image 5


Image 5b


Image 6


Image 7

Warning: Incorrect suspension settings can cause your motorcycle handle erratically and make it difficult to control. Loss of control of your motorcycle may result in great bodily injury or death. If you are not confident in your ability to properly set your suspension we strongly recommend that you have this work done by a professional mechanic.