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# INSTRUCTIONS

## MOTION PRO SAG SCALE II P/N 08-0613

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.

**Please refer to your motorcycle's service manual for specifications and recommended settings for your particular model.**

**WARNING! Refer to your factory service manual for instructions on servicing and adjusting suspension components. Failure to follow service manual instructions and/or improper use of this tool could result in great bodily injury or death.**

### Getting Started

Flip open your Motion Pro Sag Scale II and thread the knob into the conical locating pin through the slotted area. Please notice that there are measurement scales on both sides of the tool. The scale closest to the tip of the tool is intended for most full-size motorcycles, and the scale closest to the folding hinge is intended for most mini-bikes. Choose the scale which you intend to use, and fasten the cone on the opposite side.

### Rear Suspension

1. 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
2. With the tightening knob loose, 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. Fasten the tightening knob. This setting represents your maximum travel.

**Note:** Be sure to use the same reference point with each measurement taken.

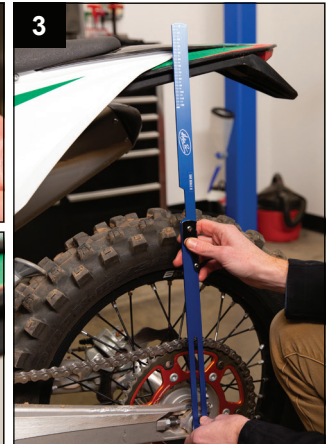
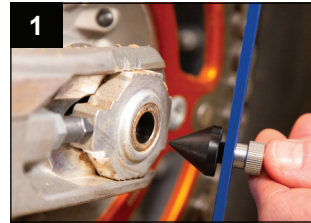
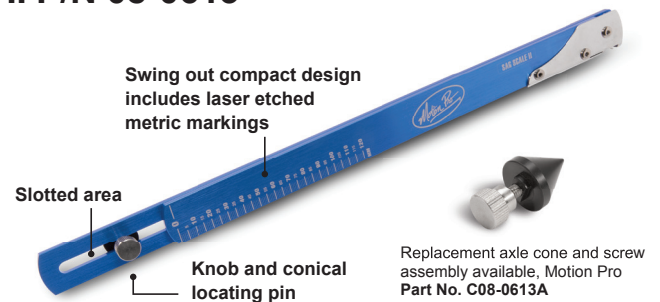
3. Remove the bike from the stand, bounce the shock a few times to settle the suspension and measure to your reference point with the bike under its own weight. This is static sag. Check your service manual for suggested static sag specifications. If adjustments are required to achieve the proper measurement, increase spring load to decrease static sag or decrease preload to increase static sag. **Note:** Please refer to your service manual for instructions on adjusting your spring preload.

4. 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. Measure to your reference point to find the rider sag. Check your service manual for rider sag specifications. If minor 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 significantly less than the target rider sag value, the shock spring is probably too stiff for your riding weight. If rider sag is significantly more than the rider sag value, the spring is probably too soft for your riding weight. **Note:** Please refer to your service manual for recommended spring rates and servicing.

### Front Suspension

1. Find a reference point on the upper fork tube or triple clamp, or place a small piece of tape just below the triple clamp to use as your reference point if necessary. Place the bike back on a stand that allows the front suspension to fully extend. Place the guide pin in 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. With the tightening knob loose, adjust the sag scale up or down in the slotted area until the zero point on the scale is aligned with your reference point. Fasten the tightening knob. This setting represents your maximum travel. **Note:** Be sure to use the same reference point with each measurement taken.

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**Front Suspension** *Cont. from page 1*

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. Observe the measurement at your reference mark to find the static sag. Fork spring preload adjustments can be made to adjust static sag. This is commonly an internal adjustment to your fork, but some motorcycles have external adjusters. Increasing spring preload will reduce static sag, and decreasing preload will increase static sag. **Note:** *Please refer to your service manual for fork spring preload adjustment procedure.*

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. Observe the measurement at your reference mark to find the rider sag. If this measurement exceeds the target rider sag value, a stiffer set of fork springs is advised. If the measurement is less than the target rider sag value a softer set of springs is recommended. **Note:** *Please refer to your service manual for recommended spring rates and servicing.*

For any additional information in regards to this tool or any other specialty Motion Pro products, please visit our website at [www.MotionPro.com](http://www.MotionPro.com).

**Warning:** *Incorrect suspension settings can cause your motorcycle to 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.*

