

PRO CIRCUIT'S TECH TIP: SETTING THE SAG

→ Want to start tuning your rear suspension for improved handling? The first step toward determining proper suspension adjustment is to set the rear spring preload, or unloaded measurement, so that the proper ride height, or race sag dimension, is achieved. Rear suspension race sag is definitely the most important single adjustment affecting your bikes handling traits. You should check this crucial adjustment before each ride or at minimum, monthly to insure it remains at your determined setting. For this adjustment procedure, the bike should be brought to normal racing weight - correct fuel, transmission oil and coolant levels. The shock should be cool to the touch, as heat build up will directly affect your sag.

Race (Rider) Sag



1. Using a tape measure, measure the unloaded dimension when your bike is supported by a bike center stand and the rear wheel is off the ground. Measure the distance from the rear axle up to the fixed point in line with the arc of the axle. Usually the fender and side panel junction or some convenient point near the fender like a seat bolt. You can put a mark on the fender, which lines up with an even number to make it a little simpler. Write down as Dimension A (Example 1:605 mm).

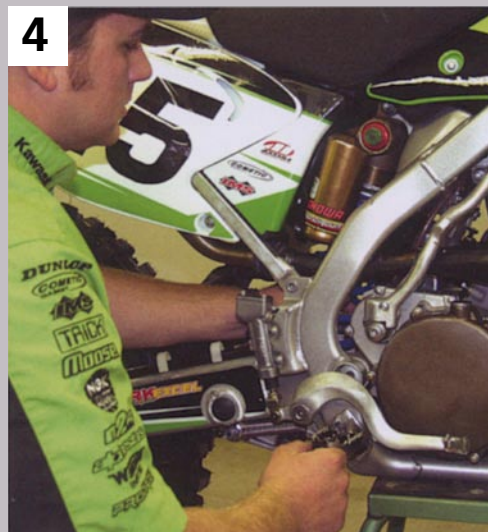


2. Now, place the motorcycle on level ground. Next measure the loaded dimension with the rider aboard, wearing all normal riding gear. Bounce your weight on the seat a couple of times to help the suspension overcome any stiction and settle to a good reference point straight up from the pegs. Make sure to keep your hands on the bars, stay in a normal riding position, and make sure all of your weight is on the seat with your feet barely touching the ground with enough to just keep your balance. Using a helper, measure the distance between the same two points determining Dimension B (Example 1:502 mm).

Note: The race sag dimension is the difference between the unloaded (Dimension A) and the loaded (Dimension B) measurements. Adjust spring preload as necessary to obtain the correct handling results.

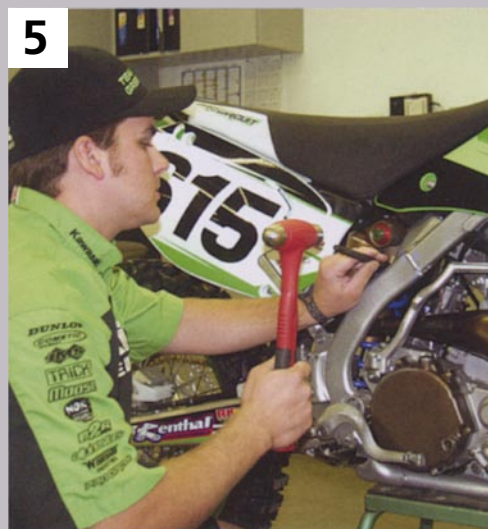


3. To change the sag, use a long punch and a large hammer to loosen the spring locking nut on the shock.



4. Then, turn the preload nut to adjust rear spring preload.

Note: Increasing spring preload will decrease race sag and visa versa



5. Once the race sag is set, retighten the lock ring onto the adjuster ring with the punch and hammer.

Example: 1

Dimension A Unloaded	= 605mm
Dimension B Loaded	= 502mm
Race Sag	= 103 mm

