

• Columns: Kyle Wyman & Chris Ulrich • Trivia & Numbers • Shops: Piaggio & Vespa Scooter Factory • • ASRA/CCS Newsletter • High Performance Parts & Services Directory • Racing, Track Day, & School Calendar •

## Product Evaluation:

## MOTOOL

## Slacker Digital Sag Scale

## By Rob Silva

he Slacker Digital Sag Scale makes it easier for a rider to measure his or her motorcycle's suspension sag accurately and consistently. Sag-or the amount the front and rear suspension compresses with the rider (wearing full gear) sitting on board—is a quick and easy way to help make sure the motorcycle's suspension will move in a reasonable range with the rider on board, and that it is not too stiff nor too soft to absorb bumps and also support the bike when taking corners at speed. Checking sag involves comparing how much the suspension is compressed with no load to how much it is compressed with the rider sitting on the seat with their feet on the footpegs. Usually, sag can be adjusted by increasing or reducing spring pre-



load; if there isn't enough adjustment available to get a reasonable sag number, changing to softer or stiffer springs may be required.

The Slacker unit comes equipped with two AA batteries, easy-to-understand directions, and is ready to use out of the box. The Slacker itself mounts to the front or rear axle using a heavy-duty magnet, and comes with a remote display that can be mounted on the handlebars using a Velcro-equipped strap. It comes with a supply of small, self-adhesive loops that can be mounted on the bodywork (more on this later)



(Above) A Slacker attached to the axle of a sportbike with the measuring cable extending straight up to a self-adhesive plastic hook on the tail. Once it's zeroed, a rider wearing gear climbs on, and it shows sag in mm. (Above, Left) A reading of 18mm means it needs less preload or a lighter spring (this bike had a stock spring) for the rider. Photos by John Ulrich.

Continued on page 21



When you're on the grid, ECSTAR Suzuki Genuine Dil puts the win in genuine. It's specially formulated to maximize throttle response, acceleration, and shifting capabilities of your GSX-R, while staying cool in extreme temperatures and high RPMs. That way, you can focus squarely on winning.

Get ECSTAR Suzuki Genuine Oil at your authorized Suzuki dealer, or online at Store.SuzukiCycles.com.



SUZUKI



A Slacker Street Bundle, with carrying case (not shown to scale) in the background. Note small, remote display/control which can be mounted on the handlebars. Directions are clear and easy to follow.

as well as a front loop that can be attached to the front forks using a Velcro strap. To make measuring sag easier, we put the front wheel in a Baxley Sport Chock, which held the motorcycle upright.

The first step is placing one of the adhesive loops on the tail-

section or rear fender of the motorcycle, on a vertical line directly above the rear axle. Next comes placing the magnet (on the back of the unit) on the head of the rear axle (the side without the nut). Next, the measuring cable is pulled vertically out of the Slacker unit and hooked to the loop attached to the tailsection. Pushing a button marked "Backlight" on the right side of the display (on the Slacker or on the remote display if it is connected to the Slacker by an included cable), activates Auto Zero. Then the tailsection is pulled up to make sure the suspension is fully extended, the Slacker Auto Zero activates, and when the tailsection is allowed to settle the Slacker (and the remote display, if connected) zeroes itself. Now the rider (wearing full gear) sits on the bike in one continuous motion (no bouncing up and down) and the Slacker displays the sag, or how much the suspension compresses under the weight of the rider, in mm. The process is repeated for the front forks, using an included adaptor to mount a loop so the Slacker measuring cable runs in a straight line parallel to the fork tube.

The Slacker manual recommends that street (or track) bikes have about 30mm of suspension sag with the rider onboard, +-5mm. According to former racer and current Öhlins suspension technician Mike Himmelsbach, sag usually varies about 5mm front to rear, with typical numbers of 25-30mm rear and 30-35mm front for MotoAmerica racers, and about 30-35mm rear and 35-40mm front for a track day rider. (MotoAmerica racebike sag is often automatically recorded by data acquisition systems on the racebikes and monitored using software.)

The Slacker system can also be used to measure and monitor ride height, determined by installed overall length of the rear shock, which, for example, can be altered by extending the installed length of a shock (with that adjustment capability built in), to increase cornering clearance.

The Slacker works as promised and takes some of the mystery out of making a motorcycle work better around a racetrack, or even on the street. If a rider wants to increase sag for street use (for a more comfortable ride) and decrease sag for racetrack use (for better handling), the Slacker can help them do that. A Slacker Street Bundle includes a Slacker, Slacker Street Kit, and 10 extra adhesive loops, and sells for \$179.99 including a Motool Service Assistant App with video instructions and recommended settings data. A Slacker Ballistic Nylon Case is an extra \$39.99. From Motool, Dept. RW, 7146 N. Greeley Ave., Portland, OR 97217, (800) 741-7702, info@motool.co, www.motool.co. RW

