



Teknik Motorsport
Unit 4/5 Harford st
Penrith 2750 NSW
PH: 02 4732 2626
FAX: 02 4732 2288

We know suspension That's what we do!

Shock Spring Installation

Teknik Motorsport would like to thank you for purchasing a part of our huge range of suspension springs.

How to install your new shock spring

- 1- Using your motorcycle owner's manual remove the existing spring.
- 2- Once the spring is removed be sure to not lose any of the unattached parts, install the spring. Once the suspension component is put back together re-fit your suspension to the bike.
- 3- Setting up the static sag and rider sag

- * Rider sag is the amount a bike sags with the rider in a seated position.
- * Static sag is the amount that a bike sags under its own weight.

First, measure and set rider sag, and then measure static sag.

Rider sag is set at a predetermined amount, to allow the suspension to operate in the correct part of its stroke. Typically, rider sag is about one-third of suspension travel. Motocross bikes and offshoots of them like the WR400/426 typically use *100mm* of rider sag. Bikes like XRs, TTRs and other trail bikes use *85mm*, and bikes in between, such as DRZ, use *90-95mm*. The KTM PDS system works best with *90mm*. Road bikes do vary model to model, but 35-40mm is often used for sports bikes. Sag is adjusted by increasing or decreasing spring preload by turning the threaded preload collars on top of the shock spring. Increasing spring preload will give you more ride height/less sag, and vice versa. Rider sag and static sag are determined by making measurements of the bike when loaded and unloaded. It is vital that the measurement is made from the same two points in each stage of the process.

4- Rider sag test

- a. Put the bike on a stand with the rear wheel off the ground. With a texta, make two marks, one on the rear fender, directly above the axle, and the other on the top of the axle nut. Measure the distance between the two marks. Our example is 650mm.
- b. Take the bike off the stand, and have the rider to sit on the bike in their normal riding position, with all their weight on the bike. Take another measurement between the same two points. Our example is 550mm
- c. The rider sag in our example is 100mm. If you're making this measurement on an MX bike you're spot-on.

5- Static sag test

- a. Allow the bike to rest on the ground, without a rider. You will need to help it balance. Take another measurement from your two-texta marks. Push the seat down and then let it up by itself. Take a measurement. Pull the seat up and then let it go. Take another measurement. If there are any variations, use an average. If there is more than 5-7mm difference, you may have a problem with binding in the linkages. Our example is 610mm.
- b. Subtract this measurement from your first one (650mm, remember?). Static sag should be between 18mm and 32mm for dirt bikes and 5-15mm for road. (please see www.teknikracing.com for the road bike suspension tips in more detail) If it's less then 18mm, the shock spring is too soft for you. If it's more then 32mm, the spring is too hard. 25mm to 30mm is ideal. In our example, static sag is 40mm, so a softer spring needs to be fitted.

After all this, you might be wondering how important sag height is. A spring is just a spring right? Wrong!

- Soft springs need too much preload to prevent the bike riding low in the shock's stroke, causing harshness, and making it kick on the entry to corners, especially in braking bumps.
- Hard springs won't allow proper squat, making the rear-end uncompliant. Your bike will ride high in the rear, increasing headshake.

Many MX bikes are made with a higher steering head angle, which causes them to steer slower in the bush. For MX models, reduce static sag by 5mm to tighten the steering angle.



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Teknik Motorsport warranty for motorcycle springs

At Teknik we know suspension, that's what we do!

Our products are manufactured or sourced from the very best materials and suppliers world wide. That's why we can proudly offer a lifetime warranty on our springs.

You buy in total confidence that the products you buy have been quality researched, developed and manufactured to our exacting specifications, so you can get the most out of your suspension.

1- Teknik's lifetime warranty.

Teknik warrants to the original retail purchaser who retains ownership of the motorcycle on which the spring was originally installed, the springs are covered against factory defects in material and workmanship(not on the finish) when used correctly.

2- What will be done?

Upon verification of warrant coverage, Teknik will either replace defective or prematurely worn out products with out charge. This is the purchases sole and exclusive remedy for any lose or damage however arising due to a non-conformity or defect in the spring.

3- Warranty Claim Procedure.

To make a claim under this warranty, the purchaser should contact the dealer in which the spring was purchased from. Teknik reserves the right to test the returned spring so as we can evaluate the non-conformity or possible defect. The purchaser is responsible to pay all the cost of removal and installing of the spring to the motorcycle and to ship the product back to the dealer where purchased, then to Teknik Motorsport then back to the dealer, then back to you. Teknik will not accept any springs sent directly to them.

4- Warranty Exclusions.

This warranty does not cover any springs that have been improperly installed. The springs should be installed by a qualified suspension specialist whom is experienced in the removal and fitting of the springs. Other things this warranty does not cover are springs which have been improperly serviced, springs that have been misused, any spring that has been modified or altered or that are subject to negligence, accident or collision, improperly installed or wrongly installed on a vehicle in which it wasn't designed for, or any vehicle in which carries more than the manufacturers suggested weight. Teknik holds the right to make any changes in materials, specifications and design to make changes they feel necessary without giving prior notice or assuming any obligations to modify any spring previously manufactured.

5- More Exclusions.

This warranty states that Teknik will warrant the entire spring that may not be modified or supplemented by any other company or person either in writing or verbal statements. Any descriptions made above about the product in conjunction with this warranty is only for identification purposes. This does not mean the product described above will be the product you receive. Any spring used to demonstrate what this warranty covers is not necessarily the product you will receive. Any statements (meaning written or verbal) made by any salesman will not over ride this warranty. The description on this page is final there are no other warranties in which will exceed this one. Any other warranties that may be implied are denied to the upmost extent allowed by the law. In no way will the refund exceed the purchase price. Some states do not allow constraints on how long an implied warranty will last.

This warranty will in noway cover any accidental damages, loss of time, any disadvantage that the purchaser may experience, loss of use of the motorcycle or any damage done to the motorcycle. This warranty will not cover any unintentional or unintended damages. Some states do not allow constraints of incidental or substantial damages, so the above information does not apply to you.

This warranty will give the purchaser certain legal claims, the purchaser may also have other claims which may change from place to place.

Note: Teknik Motorsport makes no warranties either expressed or implied. We shall not be liable for any loss, damage, injury, or death arising from the use of our product. User assumes all responsibility and risk. Motorcycle riding/racing is a DANGEROUS activity that can lead to permanent disability or death. Teknik Motorsport owners & employees make no claims as to accuracy of suggested applications of items. ITEMS ARE ONLY SUGGESTIONS.