

RACER TECH – RZR 800 XC SPRING KIT INSTALLATION

2/18/15

Thank you for purchasing the Racer Tech Spring Replacement Kit. We know you will feel a substantial improvement in your RZR's ride and handling. Below is a short explanation of how to install your new springs and a primer to tuning the springs for your vehicle. After reading this completely, if you feel you need further assistance feel free to call or email us any time.



Installing the springs –

- Remove shocks from machine and back off Preload Adjuster Nuts until there is enough room to remove the Lower Retaining Rings from the shock assemblies.
- Slide OEM springs off shock assembly and discard. Keep the Lower Retainer Rings for re-use.
- The front springs are the longest ones in the kit. Simply replace the OEM springs with these.
- The rear springs are installed with the short spring first, then the supplied spacer with the short end in to the short spring. Then install the remaining longer springs.
- Finally, install the OEM retaining rings - Once the shocks are reassembled you are ready to move on to the initial setup.

NOTE: While the shocks are off the machine be sure to lubricate the eyelets on the shocks with some grease or your preference of lubricant.

Setting up the springs -

Settings vary so much from vehicle to vehicle. It is impossible for us to give a universal answer to where you should start. Like with any coil-over shock, spring rates and preload take some fine tuning to achieve the best results. The good news is we have the rates figured out for 95% of users. As for the preload, we recommend using this formula:

- With the machine jacked up off the ground; Spin the Preload Adjuster Nuts down until they touch off on the springs. This is Zero Preload. NOTE: A common misconception is that preload is to be measured from below the head of the shock (where it meets the threaded body) to the top of the Preload Adjuster Nuts. This is false. Zero preload is when the shock is fully extended and the Preload Adjuster Nut is just touching the spring stack enough to keep it from moving up and down inside its limits. The measurement from the head of the shock should only be used as a reference point to check total preload.
- From Zero Preload, tighten the Preload Adjuster Nuts down 1/4". Use the exposed threaded bodies of the shocks as a reference point to know how far you're going.
- Set the machine on the ground after setting both front and rear Initial Preload. Before measuring your ride height, take the vehicle for a quick ride around the driveway. (The suspension needs to "settle" and will only do so by driving it. Jumping up and down on the bumpers will not suffice)
- Once the suspension is settled, measure the front and rear ride height. At Racer Tech we measure the rear at the bottom of rear frame and the front at the bottom of the chassis right below the rear mounting point of the lower A-arm.
- As a base recommendation, we set most of our vehicles at 11" front and 10" rear. The RZR seems to jump and handle better with the front end about 0.5-1" higher than the rear. For terrain with less ground clearance required we always prefer the height as low as possible. This is our preference so your mileage may vary. There is no real "wrong" way to set your vehicle up. It should always be whatever works best for you. Of course you can always add more preload to get a little extra ride height but will sacrifice ride quality.
- In the initial stages of adjustment we recommend starting with 1/2" adjustment increments. Once you feel you're close, start making 1/4" adjustments and then 1/8" until you are personally satisfied with the height and ride of your machine for your applications. It's fine to run up to 1.5" of preload with these springs but if your ride requires more than this we recommend swapping to a stiffer main spring.

Valving Adjustments –

We recommend initially backing off the compression adjusters all the way. The softer these are set the less fluid friction is created and longer the shock fluid will resist overheating. Once ride height is set you can start slowly turning these external compression adjusters in a little bit at a time until you achieve the desired firmness. If you can't get the firmness you desire back them off and add 1/4" preload to the springs front and rear. Keep doing this until it meets your needs.

Custom Tuning –

If you have followed the instructions, done all the necessary adjustments, have properly operating shocks and are still unsatisfied with your ride or performance feel free to call and ask for a spring tech. We will work with you to determine if there is a better fit for your needs. We can mix and match lots of options to make custom tailored packages to fill individual needs. Overall we've found this one rate to work excellent for all applications with valving adjustments.

We appreciate your business and hope you enjoy the improved performance of your machine!

RACER TECH – 616-928-0616 – TECH@RACERTECH.COM