RZR 4-Seat 800 Full Spring Kit

Polaris RZR 4 800 | 2010+

Part #: 5301225, 5301235

Rev. 083117

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SAFETY WARNING

RT Pro UTV recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

WHY BUY RT PRO UTV

Great off-road driving and racing comes with having the most rugged and durable machine in the pack.

RT Pro UTV performance enhancing products will make your off-road machine stronger, tougher and safer so you can have more fun and less breakdowns.

For over a decade, RT Pro UTV staff have been taking brand new UTVs and driving them to their breaking point. When they bend, break or falter, we take them back to shop and create a fix that stops the problem from happening again.

There is no other company in the industry that puts more thought, engineering and design innovation into their products than we do. Our team is made up of off-road racers, mechanical engineers and talented fabricators who live and breathe all things motorsport. Above all, we share a passion for innovation, quality construction and getting things right.

All of our products are designed for assembly by weekend warriors with normal garage tools and the occasional spot-weld. Assembly directions are complete and thorough.

Remember, when you buy a RT Pro UTV product for your UTV, all of the parts have been designed and manufactured in the United States with U.S. steel and other high quality American components.

RTP5301225 - Standard		
Part #	**Description**	**QTY**
25100300S	Front Coil Spring	2
25100350S	Rear Coil Spring	2
25035900S	Frt/Rear Coil Spring	4
04003	Coil Spring Spacer	4
04006	Retaining Ring	8

RTP5301235 - Heavy Duty		
Part #	**Description**	**QTY**
25100350S	Front Coil Spring	2
25100400S	Rear Coil Spring	2
25035900S	Frt/Rear Coil Spring	4
04003	Coil Spring Spacer	4
04006	Retaining Ring	8

FITMENT NOTES

N/A

SPECIAL TOOLS

N/A

INSTALLATION TIME

Approximately 1 hour
Easy/Medium Difficulty

INSTALLATION INSTRUCTIONS

INSTALLING THE SPRINGS

1. 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.
2. Slide OEM springs off shock assembly and discard. Keep the Lower Retainer Rings for re-use. (If using standard kit. OEM retainers are discarded if you're installing the RT Race Retainers.)
3. Start by installing the adapter rings to the top spring retainer. These will adapt your shocks to use the new larger-sized springs provided in this kit.
4. Slide the new springs on starting with the short springs. Next slide the supplied Spring Spacers on to the shock bodies. The short shoulder of the spacers should face the short spring and slide inside of it.

   NOTE: All short springs are the same rate so they can go on any shock in any order. The heavier main springs go on the rear.

5. Finally, install the long springs and the Lower Retaining Rings. You will use the remaining adapter rings the same way they worked on the top retainers.

   NOTE: The front springs may require some compression to assemble. This is normal and should be considered when setting preload."

6. 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. Polaris is shipping the RZR's out with completely dry eyelets!

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:

7. 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.

8. From Zero Preload, tighten the Preload Adjuster Nuts down 1/4" on the fronts and rears. Use the exposed threaded bodies of the shocks as a reference point to know how far you're going.

9. 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.

   NOTE: The suspension needs to "settle" and will only do so by driving it. Jumping up and down on the bumpers will not suffice

10. Once the suspension is settled, measure the front and rear ride height. At RT Pro we measure the rear at the bottom of chassis. On the front we measure at the front of the chassis base structure directly behind the lower arm rear-most mounting tab.

11. As a base recommendation, we set most of our racing vehicles at 13" front and 12" 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 12"F / 11"R. 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.

12. 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 ¼" preload to the springs front and rear. Keep doing this until it meets your needs.

THANK YOU FOR YOUR BUSINESS!

For questions or additional information feel free to call and ask for tech support or email us through our website at: rtproutv.com/contact

Show Us Your Ride!

Get a photo of your RT Pro UTV equipped vehicle and send them in for a chance to be featured in our customer gallery!