



RZR 800 50" Full Spring Kit

Polaris RZR 800 50" | 2008-2013

Part #: 5301204, 5301214

Rev. 082417

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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.



RTP5301204 - Standard		
Part #	Description	QTY
22110180P	Front Coil Spring	2
22040900S	Rear Coil Spring	2
22090250S	Rear Coil Spring	2
04001	Coil Spacer	2
04002	Coil Adapter Ring	8

RTP5301214 - Heavy Duty		
Part #	Description	QTY
22110225P	Front Coil Spring	2
22040900S	Rear Coil Spring	2
22090275S	Rear Coil Spring	2
04001	Coil-over Spacer	2
04002	Coil Adapter Ring	8

FITMENT NOTES

Fits all 2008-2013 RZR 800 50" with Sach's shocks

Will NOT fit aftermarket 2.0" shock

SPECIAL TOOLS

Spring Compressor

INSTALLATION TIME

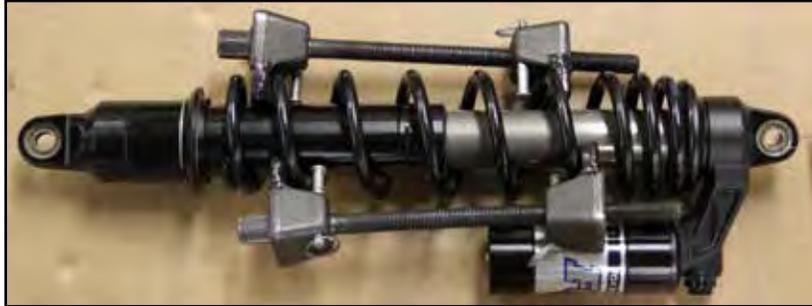
Approximately 2 hours
Easy/ Medium Difficulty

INSTALLATION INSTRUCTIONS

INSTALLING THE SPRINGS

To install these springs you will need a spring compressor. We recommend getting a loaner tool from a local chain auto parts store like Auto Zone, Advanced, O'Reily or Checkers.

Figure 1



REMOVING THE OEM SPRINGS

1. Compress the springs enough to remove the retainer rings. Save the retainer rings as you will reuse these.

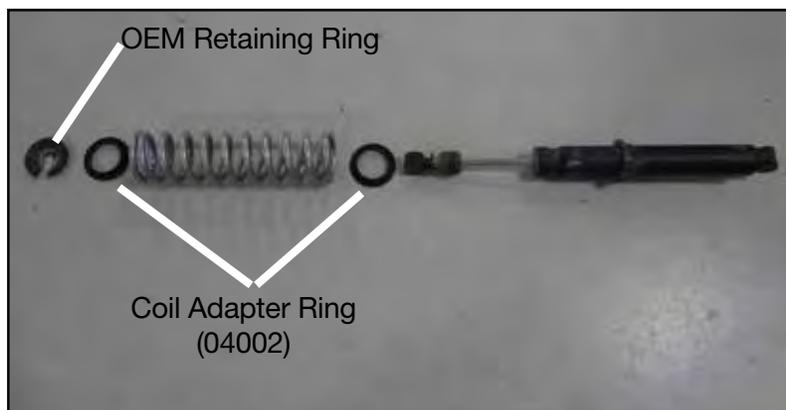
Note: the OEM springs are a COMPLETELY different design than our springs. The OEM springs are much longer when fully unloaded. Don't worry about it. The springs we've designed are the proper design. Discard the OEM springs.

FRONT

2. Slide the a coil adapter ring (04002) on first, followed by the 11" long spring over the shock. Figure 2 shows the order of installation for the spring installation

Note: If you received springs with the different ID on both ends, these are correct also. Slide the large diameter end of the spring over the shock body. The small diameter will not fit over the shock body.

Figure 2



3. Compress the new spring enough to fit another coil adapter ring (04002) and the OEM retaining ring. Make sure the preload adjuster is all the way down to allow for the easiest installation.

Figure 3

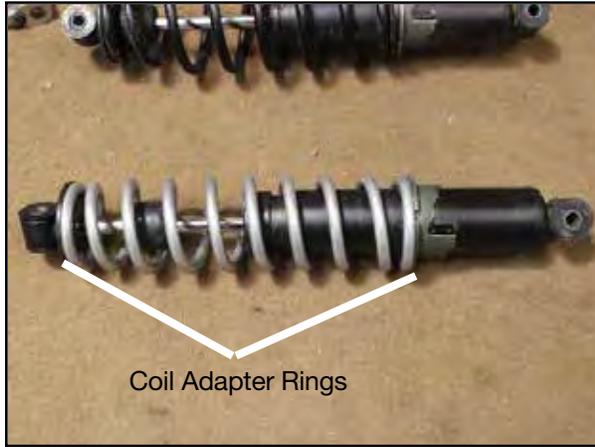
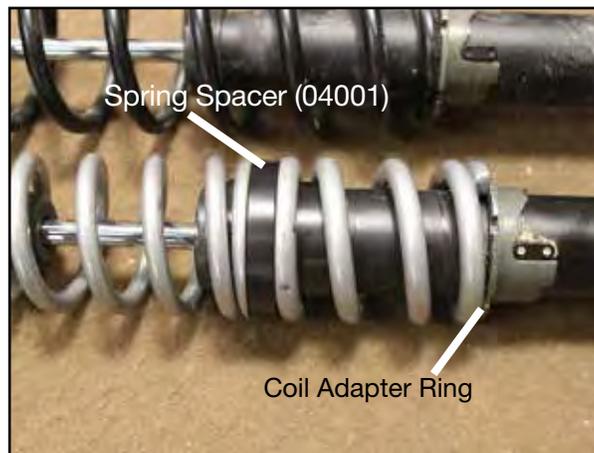


Figure 4



REAR

4. The rear springs ONLY assembly one way. The springs are a straight diameter so there is no top or bottom to them individually. The order the springs are assembled are as follows:
 1. Adapter ring (04002) 2. Short spring 3. Spacer (04001) Long shoulder in short spring 4. Long spring 5. Adapter ring (04002) 6. OEM retainer
5. The long end of the spacer goes in to the short spring in order to make as much contact as possible with the shock body.



6. Make sure a coil adapter ring is installed on the end of the short spring contacting the preload adjuster ring as well as on the end of the long spring contacting the OEM retainer.

Figure 6



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. Start with the preload adjusters backed all the way soft. You will find the front has VERY LITTLE preload and the rear has about an inch built-in. This is NORMAL.
8. 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.

9. Once the suspension is settled, measure the front and rear ride height. At RT Pro we measure the rear at the bottom of the lower A-arm mounting tubes. On the front we measure at the front of the chassis base structure directly behind the lower arm rear-most mounting tab. The RZR seems to jump and handle better with the front end about 1” higher than the rear.
10. If you desire more ground clearance or the ride is too soft, add two clicks to the preload adjusters. Repeat the test ride to settle the suspension and re-measure/evaluate the ride. There are only five settings on the OEM shocks so play with the range you have. 95% of all customers can find a setting they like within this range. We do sell stackable spring shims for this model which can add 0.5”-1” to the preload if you feel you still want a little more height/firmness.

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!