



Maverick X3 / X3 X ds Turbo Full Spring Kit

64" Track Width Maverick X3 / X3 X ds Turbo (non XRS) | 2017

Part #: 5302145, 5302146

Rev. 112217

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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.

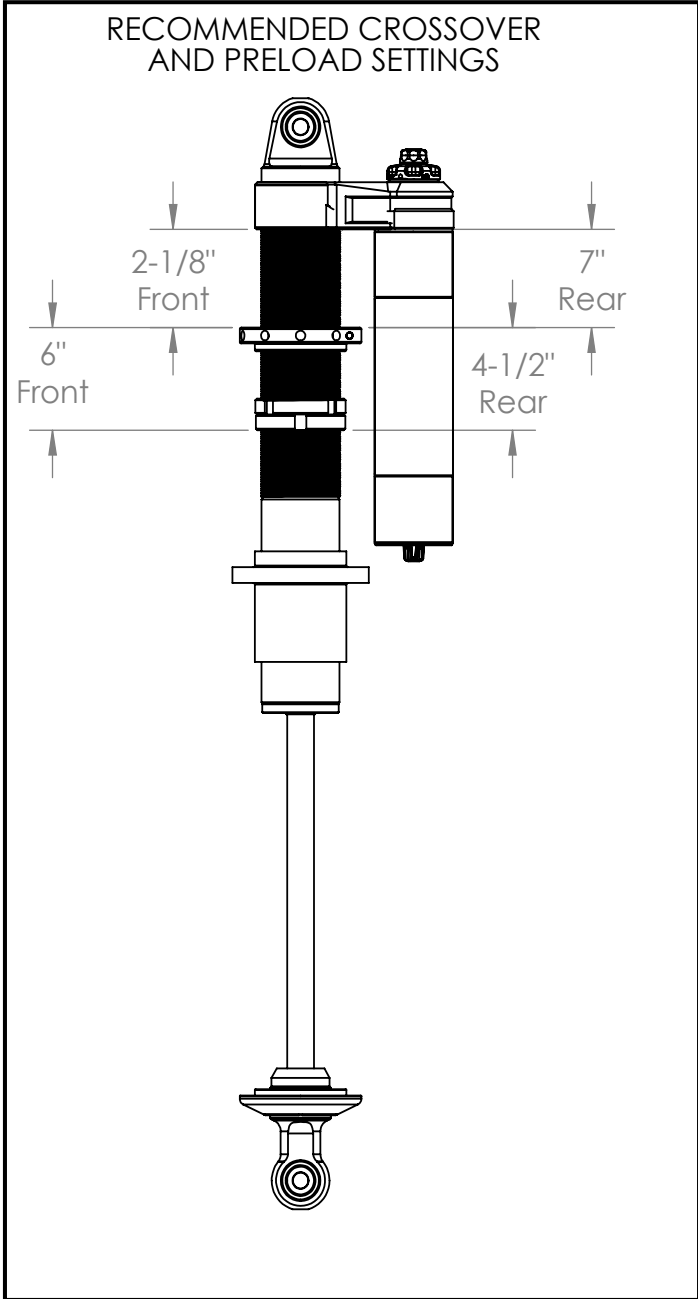
There is no other company in the industry that puts more thought, engineering and design innovation into their products than we do. Our team is made up of off-road racers, mechanical engineers and talented fabricators who live and breathe all things motorsport. Above all, we share a passion for innovation,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

RTP5302145 - Standard		
Part #	Description	QTY
30100200S	30100200S Front Tender Coil	2
30140250S	30140250S Front Main Coil	2
30100150S	30100150S Rear Tender Coil	2
30160150S	30160150S Rear Main Coil	2
04601	Sway Bar Link Mod Brkt - DRV	1
04602	Sway Bar Link Mod Brkt - Pass	1
561000134RB	5/16" x 1.00 x 1.75 Round U-Bolt	2
R186	Bolt Pack - Sway Bar	1

RTP5302146 - Heavy Duty		
Part #	Description	QTY
30100200S	30100200S Front Tender Coil	2
30140250S	30140250S Front Main Coil	2
30100200S	30100200S Rear Tender Coil	2
30160150S	30160150S Rear Main Coil	2
04601	Sway Bar Link Mod Brkt - DRV	1
04602	Sway Bar Link Mod Brkt - Pass	1
561000134RB	5/16" x 1.00 x 1.75 Round U-Bolt	2
R186	Bolt Pack - Sway Bar	1



FITMENT NOTES

Stock Wheels / Tires

SPECIAL TOOLS

Spring Compressor - Highly Recommended
Chrome thin walled socket set (6 point preferred)

INSTALLATION TIME

Approximately 1.5 hours
Easy/Medium Difficulty

INSTALLATION INSTRUCTIONS

INSTALLING THE SPRINGS

1. Power wash the shocks before removing them from the vehicle. There is a lot of unthreading / adjusting of the cross-over rings and upper coil seats. Any debris will make this extremely difficult.
2. Label the front shocks side specific, it is possible to install them incorrectly later on. This will cause interference issues. The reservoirs go 'inboard' and slightly forward.
3. 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. However, to save time, a wall mounted coil spring compressor is highly recommended.
4. Slide OEM springs off shock assembly. The rear shocks will need to have the triple rate divider removed. There is a long way to unthread the rear triple rate hardware. Make sure the threads are clean and undamaged, repair any areas of concern before unthreading!

FRONT:

5. Install the new coils with the 10" coil (30100200s) on top and 14" (301400250s) on the bottom. The below figure shows the coils installed with the suspension at full droop. Reference the cross over and preload settings figure on Page 2 for approximate starting settings. These settings will raise the ride height to give increased compression travel and improved ride quality. Make sure the spring divider is orientated correctly (long end down)!

Figure 1



REAR:

6. Install the new coils with the 10" coil (30100150s - Standard / 30100200s - Heavy) on top of the 16" coil (30160150s) on the bottom. Coilover shown at full droop. Reference the cross over and preload settings figure on Page 2 for approximate starting settings.

Figure 2



7. Reinstall front and rear shocks. Use reference marks on the front shocks to make sure they are installed at the correct side and orientation. Tighten 12mm hardware to 55 ft-lbs.

SWAY BAR:

8. Disconnect the sway bar from the sway bar links. Install brackets with 12mm hardware and new u-bolts. These brackets 'shorten' the sway bar which stiffens the spring rate to reduce body roll. Tighten 12mm hardware to 55 ft-lbs. and 5/16" U-bolts to 25 ft-lbs. Brackets install to the 'inside' of the vehicle.

Figure 3



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 will end up. 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:

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 15" front (Bottom of tube shown Fig 4) and 11-3/4" rear (Fig 5). These seems to jump and handle better with the ride height near these measurements. 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.

Figure 4



Figure 5

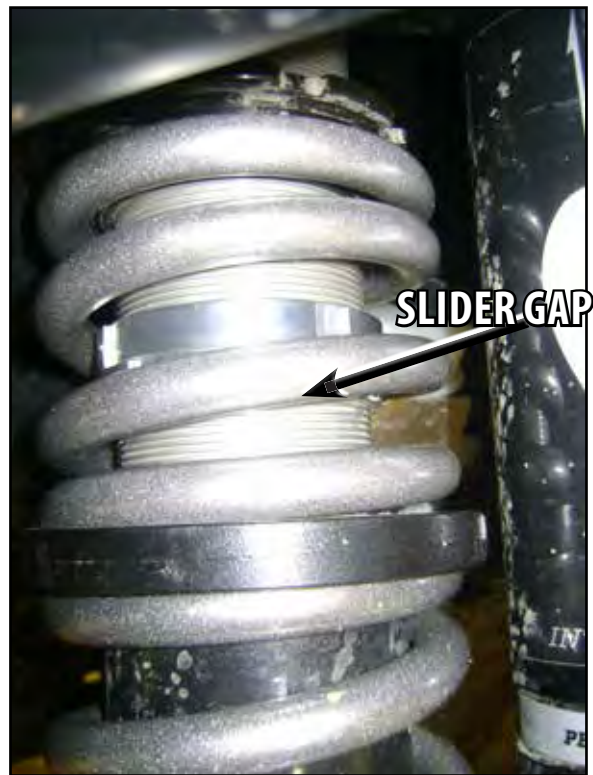


12. In the initial stages of adjustment we recommend starting with 1/2" adjustment increments. Once you feel you're close, start making 1/4" adjustments and then 1/8" until you are personally satisfied with the height and ride of your machine for your applications.

DUAL RATE SLIDER COLLARS - AT RIDE HEIGHT

13. The dual rate slider collars will change the point at which the spring rate changes from a lighter rate into a stiffer rate. The recommended travel in the front for the dual rate slider at RIDE HEIGHT is 1". The rear is 2" (Fig 6). Adjusting the dual rate slider position will change the point at which the spring rate increases. These positions are measured with the vehicle on the ground with the suspension settled.

Figure 6



VALVING ADJUSTMENTS

We recommend initially setting the compression adjusters half way on this model. The softer these are set the less fluid friction is created and longer the shock fluid will resist overheating. However the machine can be extremely soft at the softest setting causing a lot of body roll. 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 with compression adjusters, change the dual rate collar stoppers lower on the coilover body towards dual rate sliders 1/8" front and 1/4" to 1/2" rear to . Keep doing this until it meets your needs. This will change the point in the shock stroke at which the spring rate increases and give increased bottoming resistance.

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!