



RZR XP 1000 HD Radius Rod Kit

Polaris RZR XP 1000 | 2017-2018

Part #: 5201508

Rev. 031918

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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.



RTP5201509		
Part #	Description	QTY
A2039	Radius Rod - RXP Lower/XP1 Upper Assembly	2
A2040	Radius Rod - XP1 Lower Assembly	2
04616	Radius Rod Spacer Inner (0.766")	4
04617	Radius Rod Spacer Inner (0.579")	4
04618	Radius Rod Spacer Outer (0.480")	8

FITMENT NOTES

Some XP 1000's will require VERY MINOR filing to allow for the needed clearance of the trailing arm and our lower rods
 These also work for the XP 1000 4 seat and XP Turbo 2 and 4 seat.

SPECIAL TOOLS

Level

INSTALLATION TIME

Approximately 2 hours
 Medium Difficulty

INSTALLATION INSTRUCTIONS

1. Jack up the rear of the vehicle and rest on solid jack stands. You do not need to remove the wheels but it makes the job MUCH easier.
2. Once the weight is off the suspension you can disassemble the OEM Radius Rod assembly. You will discard the rods but you MUST keep track of the hardware as this will be reused with your kit.

LOWER RODS

3. Adjust the heim joints accordingly until the center to center dimensions are the same as the OEM radius rods (Approx. 25"). Normally we recommend maintaining the same thread exposure on both ends.

Note: Some RZR's have different rear knuckle castings which cause interference issues with these large heim joints. If you have clearance issues offset the radius rod tube to the inside of the vehicle leaving more threads exposed on the outside end of the tube. This will allow for the additional clearance that may be needed.

4. The XP 1000 has a very minor clearance issue with the trailing arm clearing our lower HD Radius Rods. Before assembling the rods on the machine, take a file or grinder to the outside point of the trailing arm sheet metal edge and remove approximately 1/8" from the outer point as shown. This will allow enough clearance for the lower rods to cycle up and down with no rubbing.

UPPER RODS

5. Adjust the heim joints accordingly until the center to center dimensions are the same as the OEM radius rods (Approx. 24.25"). Normally we recommend maintaining the same thread exposure on both ends.

Note: You can wait to tighten the jam nuts on all rods until the very last step. It will be easier to tighten them at this point plus you will need to set the static camber setting before you're done.

Figure 1



Figure 2



INSTALLING THE RODS

6. The supplied spacers/bushings are high misalignment spacers. They are designed to allow maximum articulation while filling the gap in fitment left by the new heim joints.

The 4 **longest** spacers (04616) are for the inner pivot points on the frame. They need to be what touches off on the chassis. They are longer so there will be clearance for the larger diameter tube to clear the chassis when it is in motion.

The 4 **medium** spacers (04617) need to go on the outside of the inner heim joints. These will touch off on the radius rod plate.

The remaining 8 **short** spacers (04618) will be used on all of the outer heim joints.

Figure 3



7. Once all the Radius Rods are installed, all the mounting hardware can be tightened except for the jam nuts on the heim joints for the upper Radius Rods. The lower rods can be tightened.
8. At this point the wheels can be put back on and the RZR can be lowered back on to the ground.

ALIGNMENT

The alignment is easiest to do with toe plates off the side of the tires. Measurement is best done with some form of an angle finder. It can be done though with almost anything that can be trusted as a flat surface to rest against the sidewall of the tire and a bubble level. With some form of a plate you must use some form of an angle reader to measure the static camber setting of the wheels. This setting is taken from the vehicles settled ride height. It's best to take it to the end of the driveway and back to settle the suspension. Jumping up and down on it in place doesn't have the same effect. Once the suspension is settled the ideal static camber setting we've found is 0° or straight up and down. This is easy to set with a bubble level in this case. To fine tune the settings, turn the upper radius rods as you would a tie rod. This will make it longer and the other direction will make it shorter. This will bring the top of the tires in or out. Positive camber is when the top off the tires lean out wider than the bottoms. Negative camber is of course when the tops of the tires are inwards more towards the center of the vehicle than the bottoms of the tires.

The RZR XP has some less than desirable handling characteristics in the rear end. We've found with a little positive camber it can reduce these effects. Another improvement found by running positive camber in the rear is the machine will turn more quickly by bringing around the rear end faster in a turn. Setting too much positive camber can however make the machine feel too slippery. By slippery we mean the back end slides too much and try's to swap out at speed.

We recommend trying different settings and finding out what works best for you. Each driver and each application is different and there's no right or wrong way to do this within reason. Our recommended limit of reason is plus or minus 2°.

9. Once the alignment is complete, tighten the upper jam nuts on the heim joints and double check all the other fasteners once over to verify they are tight.

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!