



RZR XP *STS* SUSPENSION SYSTEM

INSTALLATION INSTRUCTIONS

PARTS INCLUDED:

- | | |
|----------------------------|------------------------------|
| 4 - FRONT A-ARMS | 2 - LONG REAR RADIUS RODS |
| 4 - GREASE FITTINGS | 4 - 1/2" ROD ENDS |
| 2 - REAR TRAILING ARMS | 4 - JAM NUTS |
| 2 - 3/4" ROD ENDS | 6 - THIN INSERTS |
| 4 - ROD END INSERTS | 2 - THICK INSERTS |
| 2 - JAM NUTS | 1 - RADIUS ROD SUPPORT PLATE |
| 4 - BRAKE LINE MOUNTS | 2 - REAR AXLE SHAFTS |
| 2 - SHORT REAR RADIUS RODS | 2 - FRONT AXLE SHAFTS |
| 4 - 1/2" ROD ENDS | 16 - BOOT STRAPS |
| 4 - JAM NUTS | |
| 6 - THIN INSERTS | |
| 2 - THICK INSERTS | |



FRONT A-ARMS:

To install the front a-arms, you need to remove the OEM a-arms from the car, and remove the pivot hardware and ball joints. Install those parts into your new LSR a-arms in the exact same way, and install them back onto your car. Make sure the snap rings are fully seated on the ball joints. See Fig 1 and 2 for details. You should not have to adjust the toe in, unless it was changed from the original factory settings.

Fig. 1 Correct



Fig. 2 Incorrect



REAR TRAILING ARMS:

The installation of the new trailing arms are the same as removal, with a few exceptions. The rod ends need to be threaded into the arm as far as possible, and tighten the jam nuts. Included are brake line clamps for each arm, which are to be used to hold the brake lines in place across the top of the trailing arm so they are protected. Make sure the lines don't rub against any moving part such as the axle shaft or wheels.

REAR RADIUS RODS:

The installation is the same as removal, with a few exceptions. To make sure you have the new radius rods the exact same length as the stock ones, turn in the rod ends all the way against the jam nuts, so they are the shortest length possible. Make sure the jam nuts are tight. The thicker insert goes on the chassis side of the rod, towards the front of the car to keep the rod away from rubbing the frame. The thinner inserts go into all of the remaining positions on the rod. If you want to increase the camber of the rear tires, you can lengthen the lower rod by turning the rod end out the desired distance.

RADIUS ROD SUPPORT PLATE:

To install the support plate, you will need to raise the rear of the car on jackstands. Simply unbolt the plate, and install the new one the same way using the OEM hardware.





RZR STANDARD AXLE INSTALLATION INSTRUCTIONS

PARTS INCLUDED:

- 2 Front Axle Shafts
- 2 Rear Axle Shafts
- 4 or 6 Long Band Clamps
- 8 Short Band Clamps
- 4 or 2 Long Stainless Band Clamps
- 3 Circlips

TOOLS NEEDED:

- Needle Nose Pliers
- Small Flat Blade Screw Driver
- Diagonal Cutters
- Moly CV Joint Grease
- Large Dead Blow Hammer
- Bench Mounted Vice

Axle Shaft Sizes:

XTR +8 A-Arms	MTS +4 A-Arms	XTR +8 A-Arms	XTR +8 A-Arms
		RZR S 08-10	RZR S 11

Front Axle Shaft	23.875"	20.175"	23.875"	23.875"
Rear Axle Shaft	21.50"	17.77"	21.35"	21.75"

Shown in Overall Lengths



1. Axle Shaft Removal:

First, you need to remove the front and rear hub and spindle assemblies from the a-arms. To remove the axle from the differential, all that is needed is a swift pull on the shaft straight out. You can use the slide motion of the CV joint to assist. It should only take a couple of quick thrusts to pop them out of the differentials by hand.

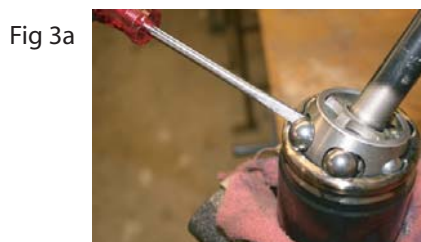
2. Axle Shaft Disassembly:

Work in a clean area with lots of rags handy, as this will be a messy job. Take care not to get any contaminants in the joints to aid in reassembly. Now that the axle assemblies are removed, you will want to clean them thoroughly using a degreaser and rags. Remove all dirt and sand etc. before you take them apart. You will need to remove the boot clamps by using a small flat blade screw driver to open them up or cut them with diagonal pliers. Pull the boots away from the CV joint. The CV needs to be taken apart using a vice and hammer as shown in Fig. 1. Grasp the joint, and hit the CV joint as shown. It will take a decent amount of force to pop them loose. Remove the small clip as shown in Fig. 2. Slide the boot off of the shaft. Then on the diff. side, there is a small retaining ring as shown in Fig. 3 They can be removed the same way as the wheel end, or can be taken apart removing the clip that holds the whole cv star, cage and balls. Slide off the inner CV joint. Remove the last boot from the shaft. All axles use the same system to remove but on the rear diff side see note below. But please note, not all parts are the same, so we recommend doing them one at a time.



Rear Diff Side Joint Details

We have found that on a few cases, the rear differential side joints can be tough to take apart. If you can't remove the axle using the vice and hammer method above, some extra steps will be needed. Pull the axle out towards the end, and angle it over as shown in Fig 3a. It will take some force to pry it over to compress the notches that keep it from coming apart. Use a medium size flat blade screw driver to pop the ball loose. Then repeat for the next ball, until the cv cage and star are free. You should be able to press out the axle from the cv star. In some cases we have had to machine the end of the axle off to remove the snap ring because it wouldn't compress. You can take the axle to a local machine shop, and have them machine it down as shown to remove the clip. We have included extra clips in case you damage the OEM ones. Make sure the cv star and cage goes back together exactly how it was originally. It does matter!



Machine down as shown to access snap ring





RZR STANDARD AXLE INSTALLATION INSTRUCTIONS

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Front Wheel Hub End



Front Differential End



Rear Differential End



Rear Wheel Hub End



3. Axle Shaft Reassembly:

You will need to find the right length axle shaft for the location you are working on, using the chart above. Pick an end to start on using the pictures above as a guide. Slide the boot onto the axle shaft. Then install the small circlip into the groove using needle nose pliers. We have included extra circlips incase you damaged the OEM ones. Take the wheel side stub end, and rest it on a table with the joint facing up. Slide the shaft into the CV joint, and make sure it is pointing straight up. Tap on the end of the axle to compress the snap ring, and it will fall into place. Make sure the axle is fully seated in the CV joint by trying to pull it back out. Then, on the other side, slide on the other boot, then repeat the process. Now you can pack the CV joints with high quality moly CV joint grease. Now slide the boots into position. Use the new straps provided to secure the axle. To install the new straps, insert the thin end into the slot of the other end, and pull it through similar to a zip tie. Position the strap around the groove on the boot and make sure it is even. Pull the thin end with pliers. It will be necessary to hold the bulkhead of the strap as you pull on the end with pliers as shown in Fig. 4 to make it tight. Pull it as tight as you can. Make sure the strap is tight around the boot, then cut off the access strap with diagonal pliers or tin snips. We also can supply you with a small tool, or you can go to any automotive parts store and purchase or rent a cv boot strap tightening tool if you can't get the straps to stay on tight using the pliers method.

Please Note!

The stainless steel boot straps are for the front differential side boots, as there is minimal clearance around the frame for the nylon versions.

RZR S and 4 versions need the stainless straps on the rear wheel side as well.

You can rent these tension type tools from local auto parts stores to help install the cv boot clamps



Fig. 4



4. Axle Shaft Installation:

Place the differential end of the shaft into the differential. Make sure the splines are lined up. You can do so by making sure the axle can't spin, and that it is partially seated into the differential. You can use a dead blow hammer to tap the shaft in until it is fully seated. On the rear axles, you might need to use a piece of wood and a normal hammer to install, as the rear clips are a little harder to seat. Make sure not to damage the axle threads.