



RHINO STANDARD AXLE INSTALLATION INSTRUCTIONS

PARTS INCLUDED:

- 2 Front Axle Shafts
- 1 Left Rear Axle Shaft
- 1 Right Rear Axle Shaft
- 8 Long Band Clamps
- 8 Short Band Clamps

TOOLS NEEDED:

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

Axle Shaft Sizes:

| | XTR +6.5 A-Arms | MTS +3 A-Arms | Bracket Lift Kit |
|-------------------------------|---------------------------|-------------------------|---------------------|
| Front Axle Shaft | 22.75" | 19.30" | 18.33" |
| Left (driver) Rear Axle Shaft | 22.95" | 19.38" | 18.55" |
| Right (pass.) Rear Axle Shaft | 24.30" | 20.60" | 19.85" |

Shown in Overall Lengths

I. Axle Shaft Removal:

First, you need to remove the front and rear hub and spindle assemblies from the a-arms. They should slide off of each shaft. Take note of the o-ring that goes between the hub and spindle bearings. Before removing the axle shafts, you might want to drain a small amount of gear oil from the differentials, so it doesn't leak from the axle openings. It only requires that a few ounces be drained. 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. Pull the boots away from the CV joint. The wheel side of 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 that needs to be removed using a small screw driver. Next, slide the joint out of the housing. Using the pair of snap ring pliers, remove the clip on the end of the shaft. Slide off the inner CV joint. Remove the last boot from the shaft. All axles use the same system to remove. But please note, not all parts are the same, so we recommend doing them one at a time.

Fig 1



Fig 2



Fig 3





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XTR +6.5 A-Arms **MTS** +3 A-Arms Bracket Lift Kit

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Shown in Overall Lengths

Wheel Hub End



Axle Shaft

Large Boot

Circlip

Wheel Stub

Differential End



Diff Stub

Circlip

Snap Ring

Inner CV Joint

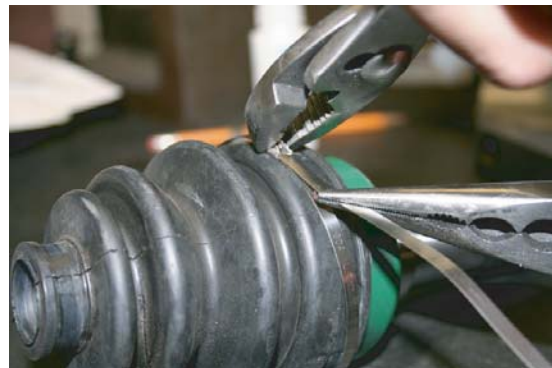
Small Boot

Axle Shaft

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. We recommend starting on the wheel hub side, as it is a little more tricky to put back together. Slide the larger boot onto the side with the larger splines. Then install the small circlip into the groove using needle nose pliers. 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. You need to close the circlip with a pair of needle nose pliers, as you tap on the end of the axle to slide it into place. Then, on the other side, slide on the smaller boot, then the inner CV joint, with co-bore side going on 1st, and install the snap ring. Make sure the snap ring is fully seated in the groove. Then slide the assembly into the outer differential stub. Install the circlip into the groove on the stub. Now you can pack the CV joints with high quality moly CV joint grease. Now slide the boots into position. You can re-use your old boot clamps, or use the new straps provided. 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.

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. Add recommended gear oil to differentials.