

780 Professional Drive N. Shreveport, LA 71105 Phone (318)-524-2270 Fax (318)-524-2297 Max Clearance Honda Pioneer 1000 Front Forward Arched Control Arm Kit

Read before Installation

This product is designed for use on ATVs and/or RUVs to increase ground clearance and fender clearance. Purchasers should be aware that use of this product may increase the frequency of required maintenance, part wear, and will raise the center of gravity on your ATV and/or RUV, increasing risk of roll-over, injury and death on all types of terrain. It is your responsibility to always inform other operators and passengers of this vehicle about the added risks.

High Lifter Products, products are designed to best fit users ATV/RUV under stock conditions. Adding, modifying, or fabricating any OEM or aftermarket parts will void warranty. High Lifter Products, products could interfere with other aftermarket accessories. If the user has aftermarket products on machine, contact High Lifter Products to verify that they will work together. Adding aftermarket suspension components and/or more aggressive tires can cause breakage of other OEM driveline components such as differentials, axles or drive shafts.

We recommend that wider tires and/or wheel spacers be used to achieve a wider stance and to improve stability of the ATV and/or RUV. Riders should be advised that the handling characteristics of a taller ATV and/or RUV are different and require extra care when riding, particularly on side hills or off-camber situations. If you further raise the center of gravity by adding taller tires, heavy loads to racks or seats, or by any other means, the ATV and/or RUV must be operated with even more care, at slower speeds and on relatively flat ground. All turns should be done at a slow speed, even on level ground.

Operation of an ATV and/or RUV with or without modified suspension components, while or shortly after consuming alcohol or drugs, subjects the rider to the risk of serious bodily harm or possible death. This risk is compounded if the rider does not wear an approved helmet and other safety gear. High Lifter urges that all approved safety gear be worn when riding an ATV and/or RUV as a driver or passenger.

By purchasing and installing High Lifter Products, products, user agrees that should damages occur, High Lifter Products will not be held responsible for loss of time, use, labor fees, replacement parts, or freight charges. High Lifter Products will not be held responsible for any direct, indirect, incidental, special, or consequential damages that result from any product purchased from High Lifter Products. The total liability of seller to user for all damages, losses, and causes of action, shall not exceed the total purchase price paid for the product that gives rise to the claim.

If this product is not what you expected, or is not consistent with your intended use, you should return the product immediately to the seller, <u>before installation</u>, for a refund of the purchase price; less any fees. After installation, product is warranted for 90 days for defects in workmanship and materials. High Lifter Products will warranty only parts provided by High Lifter Products. Any damage or problems with OEM housings, bearings, seals, or other manufacturer's products will not be covered by High Lifter Products. Parts and products will not be warranted if item was not installed properly, misused, or modified.

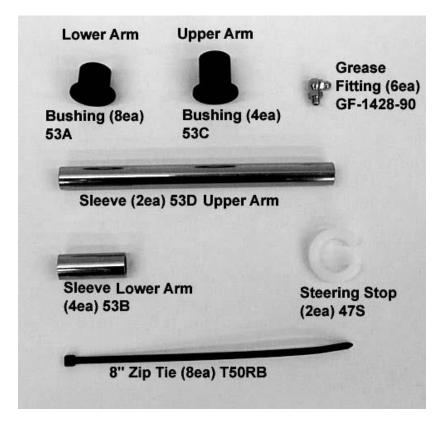
Dealers and other Installers

You are responsible for informing your customer and end user of the information contained above and the increased potential hazards of operating an ATV and/or RUV equipped with modified suspension components. If you install any suspension modifying components, it is your responsibility to also install the warning label prominently in view of the driver and in prominent view of the driver and passenger on RUVs and multi-passenger ATVs. They should also be instructed to notify anyone operating the vehicle, as well as any passengers, that said vehicle is modified.

As discussed above, it is critically important that they be instructed in the need for slower speed operation, regardless of terrain, after this lift kit is installed.

All Position are from the seated position Left is drivers side & Right is passenger side. Parts Diagram





NOTE:

When installing the new bushings apply a thin layer of grease to the surface of the bushings and inside the bushing sleeve. Due to the tight tolerances and fit of the delrin bushings they may be sealed to the sleeve. You may not be able to insert grease in through the grease fittings until there is a little wear on the bushing. This is not uncommon and should not be a concern.

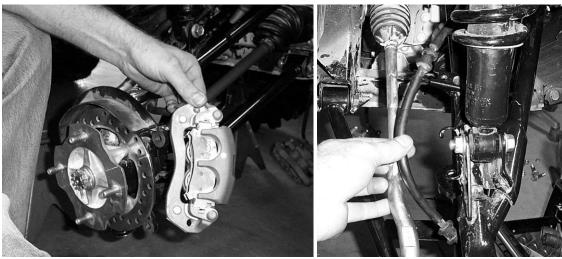
NOTE: These instructions are used in kits that come with or without ball joints. If you have purchased a kit that has the ball joints preinstalled, then the ball joints are not shown in parts diagram.

Installation Instructions:

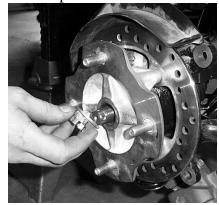
- 1. Place jack under center of RUV front end and lift until front wheels clear the ground. Be careful to support the RUV properly so that it is securely supported but so that Control arms and shocks can droop to full extension.
- 2. Remove front wheels.



3. Disconnect the brake lines from the control arms. Disconnect the calipers from the hub/rotor assembly. **Do not disconnect then brake lines from the calipers!**



4. Remove the cotter pin that secures the castle nut to the axle. Once you have done this remove the castle nut and pull off the hub/rotor assembly.





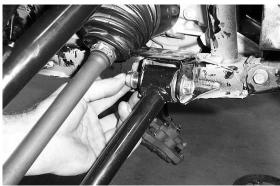
5. Disconnect the tie rods from the knuckle assembly.



6. Because it is difficult to disconnect the upper and lower control arms from the knuckle assembly, it will be easier to disconnect them from the frame and pull the upper and lower arms off as a complete unit still attached to the knuckle. Once you have the assembly off you will have easier access to the cotter pin and castle nut that connects the arms to the knuckle.

7. Disconnect the upper and lower control arms from the RUV. Disconnect from the frame and shock.

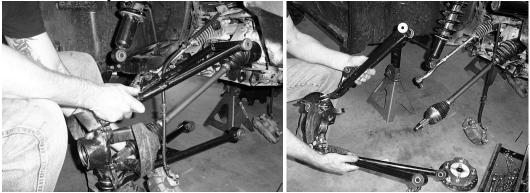








8. Pull the assembly off the RUV.



9. Next disconnect the arms from the knuckle assembly.

NOTE: Once you remove the cotter pin and castle nut, give the hub a strong tap near the ball joint area and it should pop out of the knuckle.









10. The next steps for removing and reusing your factory ball joints only applies if you purchased a kit without ball joints preinstalled. If you purchased a kit with ball joints already installed, then proceed to STEP 14 in the installation instructions.

11. Remove the ball joints from the stock control arms. You will need to reuse these in the new kit. You need to use a press to get the ball joints out of the arms.

NOTE: It is very difficult to remove the ball joints from the factory arms, so take care when removing them.







12. Install the factory ball joints into the new arms.

NOTE: A press or a vise is suggested for removing and replacing the ball joints. If you press in the ball joint crooked, <u>DO NOT TRY TO FORCE IT IN!</u> If you try to force it straight you can "egg" the opening. Press the ball joint out and reinsert it into the opening, pressing it in with a vise. Verify that the clip snaps into place after installing the ball joints into the new Control Arm. You should always double check the ball joint snap ring for proper fit. Even if you use snap ring pliers, it may not seat. You can use a flathead screwdriver and a hammer to tap the snap ring to ensure that it is seated into the grove.

13. Install the new bushings and sleeves. If you place some grease on them it makes the installations easier.

NOTE: When installing the new bushings apply a thin layer of grease to the surface of the bushings and inside the bushing sleeve. Due to the tight tolerances and fit of the delrin bushings they may be sealed to the sleeve. You may not be able to insert grease in through the grease fittings until there is a little wear on the bushing. This is not uncommon and should not be a concern.

- 14. When installing the bushings please note that included in the kit are new bushings and sleeves. Bushing 53C and Sleeve 53D are for the upper arms. Bushings 53A and Sleeve 53B are for the lower arms.
- 15. Install the grease fitting into the new arms before installation. DO NOT OVER TORQUE THE FITTINGS.



- 16. Before you attach the new arms you need to install the steering stop kit.
- 17. Turn the steering wheel all the way opposite the direction of the side that you are working on. If you are working on the passenger side turn it all the way to the left. This will give you working room on the rack and pinion.

NOTE: In order to re-secure the boot you will need to turn the steering wheel closer to the center to give you some play in the boot.

18. The boots on the rack and pinion are held on by bands. You will need to cut the band that secures the boots to the inside of the rack and pinion.







19. Next pull the boot back to expose the inner tie rod joint.



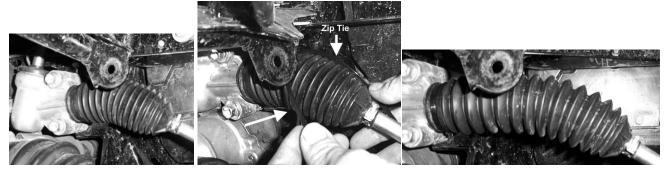
20. Place the steering stop clip between the inner tie rod joint and the rack and pinion. It is a tight fit, so you may have to force it on this is to ensure that the spacer stays in place.







21. Pull boot back over the ball joint and steering stop and refasten with 8" zip tie provided. Be sure to verify the zip tie is tight so prevent material from getting into the boot.



22. Reattach the upper and lower arms to the knuckle assembly using the factory hardware.





23. When you have reattached both upper and lower arms to the knuckle attach the entire assembly to the frame.

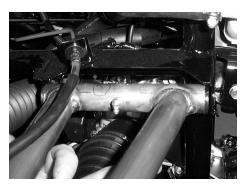
NOTE: Do not reuse the factory caps on the end of the upper arms.



NOTE: Make sure to insert the axle into the knuckle when sliding the upper and lower arms into place on the frame.

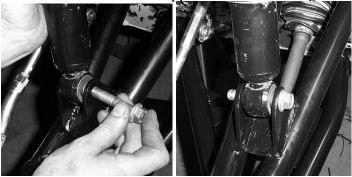
24. Use the factory nuts and bolts to connect the new control arms to the RUV frame.



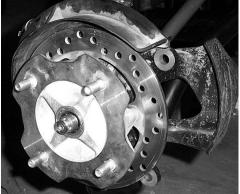




25. Connect the shock to the upper control arm using the factory hardware.

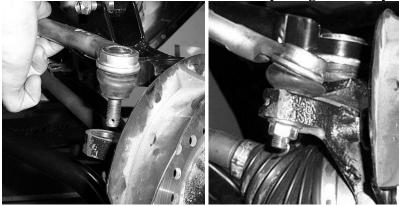


26. Attach the rotor/hub assembly to the knuckle. Secure it in place with the factory castle nut and cotter pin.

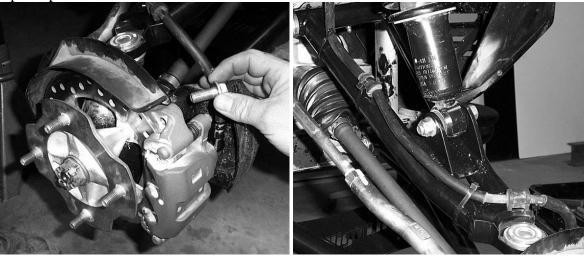




27. Attach the tie rods to the knuckle assembly using the factory castle nut and cotter pin.



28. Attach the caliper to the hub assembly and secure the brake lines with the zip ties provided. Use three zip ties per side.



- 29. Repeat steps for the opposite side.
- 30. Once you have completed the installation, place wheels back on the RUV and torque lugs to factory specifications.





High Lifter Lifetime Warranty

From the beginning, High Lifter has engineered and manufactured some of the toughest, most durable products on the market. That's why this product comes with a Lifetime Warranty. It's our promise that High Lifter will never let you down.

- The **Lifetime Warranty** covers products sold to the original purchaser only and is not transferable. The term of the warranty is for the lifetime of the vehicle in question.
- Normal wear and tear items and finishes, such as, but not limited to: Heim joints, tie rod ends, ball
 joints, bearings, seals, bushings, bushing sleeves, zinc plating, powder coating, or chipping and
 discoloration of any finish is not covered.
- High Lifter will ship the replacement product after the returned product has been inspected by High Lifter staff.
- The warranty shall not include claims for damages, installation time or labor charges, economic losses, inconvenience, transportation, towing, down time, direct or indirect or consequential damages or delay resulting from any defect.
- The warranty does not apply to products that have been improperly applied or improperly installed.
- **SPECIAL NOTE:** Warranty will not cover improper installation of ball joints. Any Max Clearance Control Arm Kit that uses ball joints as part of the installation will require inspection before eligibility for warranty can be determined. If the arms show damage, marks, or scarring of improper installation, the warranty will be not be approved.

Making a warranty claim

- 1. All claims must be accompanied by the part and the original sales receipt or other acceptable proof of purchase from the original owner.
- 2. All warranties must be accompanied with a Return Merchandise Authorization (RMA) number. (Contact High Lifter at 318-524-2270 or 800-699-0947 for an RMA number)
- 3. When shipping the damaged product:
 - a. Write the RMA number on the outside of the box.
 - b. Also include the RMA number, proof of purchase and any notes inside the box.
 - c. Please keep your tracking number and shipment information.
- 4. The customer is responsible for shipping the product to High Lifter--return shipping within the lower 48 states will be paid by High Lifter products. With all warranty claims, only standard shipping services apply.
- 5. High Lifter will process your order within 24 business hours of receiving the returned item.
- 6. Ship to: High Lifter Products, 780 Professional Drive North, Shreveport, Louisiana 71105