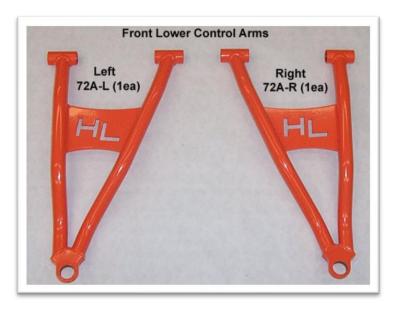


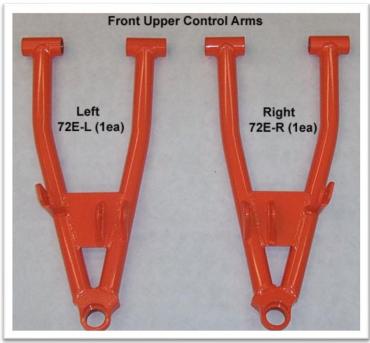
## INSTALLATION INSTRUCTIONS MCFFA-RNG1

Max Clearance Polaris 1000 Front Forward Arched Control Arm Kit



### **PARTS DIAGRAM**



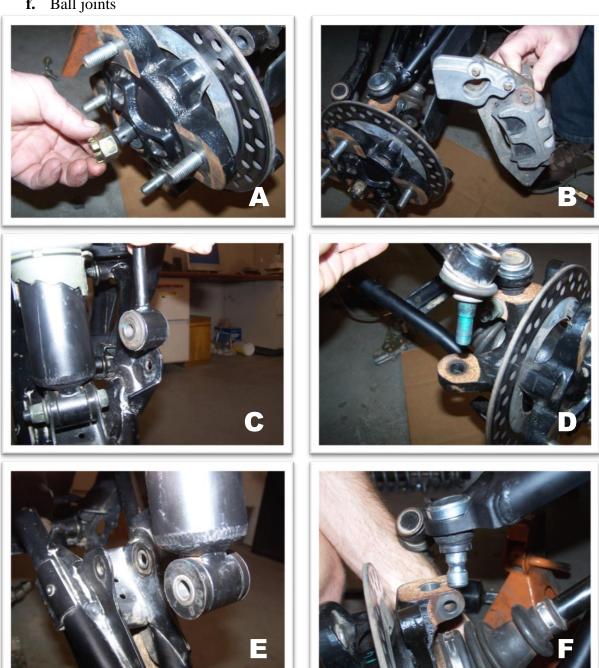




NOTE: These instructions are used in kits that come with or without ball joints. If you have purchased a kit that has the ball joints preinstalled, then the ball joints are not shown in parts diagram.

### **Installation Instructions: (PASSENGER SIDE)**

- 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. Before removing the upper and lower control arms from the RUV. You will first need to disconnect:
  - a. Axle nut and cotter pin
  - **b.** Caliper and brake line from control arm
  - c. Sway bar link
  - **d.** Tie rod
  - e. Shock
  - f. Ball joints



NOTE: When disconnecting lower ball joint from the knuckle assembly. You will need a 6mm hex key to hold the stud in place while removing the nut.







- 4. Now disconnect and remove the stock upper and lower control arms.(You will reuse the stock hardware)
- 5. You will need to remove the pivot caps, sleeves, and bushings from the factory arms.

  NOTE: Take care when removing the bushing from the collars! There is a stop built into the factory arm that prevents the bushing from pushing out when installed. Because of this, the bushing must be pushed out from the opposite side!! A center punch is recommended to remove the bushings.













- 6. NOTE: The 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 9 in the installation instructions.
- 7. Remove the ball joints from the STOCK control arms. You will need to reuse these in the new kit.
  - a. Remove snap ring from ball joint.





b. Using a press or a vise is suggested for removing and replacing the ball joints.



8. Reinstall ball joints into the NEW control 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.







9. Now reinstall the bushings, sleeves, and pivot caps into the new arms. If you place some grease on them it makes the installation easier.

NOTE: Once the bushing is inserted, you will need to use a socket to help push it in all the way!







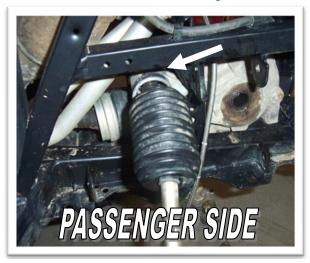




- 10. Before you attach the new arms you need to install the steering stop kit.
- 11. Start with the driver's side as this has the least amount of room to get your hands in and once you install the spacer on the passenger side you will have less play on the driver's side.
- 12. Turn the steering wheel all the way to the right. If you are working on the passenger side turn it all the way to the left.

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.

13. The boots on the rack and pinion are held on by zip ties. You will need to cut the zip tie that secures the boots to the inside of the rack and pinion.



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



15. Place the steering stop (10U) 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.

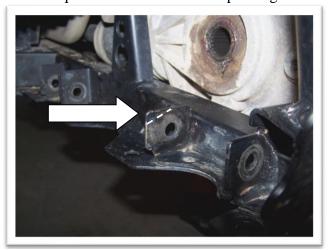




16. Pull boot back over the ball joint and steering stop and refasten with an (11" zip tie). Be sure to verify the zip tie is tight so prevent material from getting into the boot.



17. Before installing the new lower control arms, you will need to remove some material from the inner frame tab nearest to the axle. Remove just enough so the axle can clear the tab when it's at full droop. This is required on both driver and passenger sides.





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

NOTE: When installing the control arms, you will need to insert them at an angle to fit between the frame tab and the outer frame.





19. Reconnect the knuckle assembly to the ball joints.









20. Reconnect the sway-bar to the upper control arm using the factory hardware.





21. Reconnect the bottom of the shock to the upper arm using the stock hardware.





22. Reconnect the tie rod to the knuckle assembly.





23. Reconnect the brake caliper and secure the brake line. Use the **8" zip ties** provided to secure the brake line to the new upper control arm.

NOTE: Make sure the brake lines still have enough slack in them at a full turn before tightening the zip ties all the way.





24. Repeat steps for the opposite side.

25. When both sides are complete, check the alignment before putting the wheels back on.

### 26. Aligning the front wheels:

- a) Make sure that the brake rotors are straight to sight.
- b) Take a tape measure and measure from inside to inside on the front and back ends of the rotors.
- c) They must both be the same distance. If they do not then you will need to adjust the tie rods in or out. This is setting the toe to zero.

NOTE: A slight toe out makes the steering less sensitive and the UTV more stable. When adjusting the toe, be sure to take the time to adjust both ends half the required distance.





- 27. When you have achieved your desired setting, lock the tie rod in place with the jam nut.
- 28. Place wheels back on the UTV and torque lugs to factory specifications
- 29. You may need to check the factory steering.

NOTE: The steering from the factory for the Polaris Ranger 1000 may not be centered. This can cause the tie rod ends to have more engagement on one side and less on the other. This also causes the steering wheel to not be centered. If your steering is already centered then you <u>WILL NOT</u> have to follow these next steps.

### 30. Setting the steering to ZERO:

a) When the steering is zeroed, check the steering wheel to make sure that it is properly positioned or not. If the steering wheel is not centered, you will need to remove the center cap with a flat head screwdriver to gain access to the steering wheel nut.





b) Using a ratchet, turn the steering nut counter clockwise. Continue this until the steering wheel locks at full turn, and then loosen the nut. **Do not remove the nut yet.** 





c) Once you break free and loosen the nut. Back it off just enough leaving a few threads left. Next, take a hammer and tap on the nut while pulling up on the steering wheel until it breaks loose. But <u>DO</u> <u>NOT</u> hammer too hard, it could damage the nut or threads. Now remove the nut and steering wheel. NOTE: You may need a puller to remove the steering wheel if you can't break the wheel free with a hammer.







d) Now will be the time to adjust the steering wheel accordingly. Replace the wheel and make sure the wheels are turned back straight. The steering wheel should be straight up and down.
 NOTE: Rolling vehicle back and forth may help straighten the wheels.





e) Now thread back on the steering wheel nut. Turn the nut clockwise until the steering wheel locks at full turn, and tighten the nut. Then replace the center cap.

NOTE: You may want to apply Loctite to the nut.

# Thank You For Choosing

### 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.



### **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