

# Can-Am Outlander 1000/850 Front Forward Arched APEXX Control Arms

**79-84414 - HDFFA-C10L-2-B**

**79-16925 - HDFFA-C10L-2-B-BJI**

**79-16926 - HDFFA-C10L-2-B-APX**



**HIGHLIFTER**

**SEIZMIK™**



[sales@highlifter.com](mailto:sales@highlifter.com)



800-699-0947 | 8:00am - 5:00pm CST



7455 Atkinson Drive, Shreveport, LA 71129



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Parts Available For These Popular Brands and Others

**POLARIS**

**can-am**



**HONDA**

**Kawasaki**

**YAMAHA**

## **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, before installation, 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 kit is installed.

## PARTS DIAGRAM

ITEM	PART #	DESCRIPTION	QTY
<b>1</b>	79-16881	LOWER COLLAR BUSHING ASSEMBLY, 10 MM	1
<b>2</b>	79-14871	MISALIGNMENT BUSHING - M10 BALL	8
<b>3</b>	73-10858	5/8 NF HEIM	4
<b>4</b>	54-60882	5/8-18 NF RH JAM NUT	4
<b>5</b>	79-84428	FRONT FORWARD OUTLANDER G3 ARMS	1
<b>6</b>	54-60614	WARNING ROLLOVER HAZARD DECAL	1
<b>7</b>	73-10474	HIGH LIFTER LOGO BADGE	2
<b>8</b>	79-14812	1-1/4 BRAKE LINE CLAMP	1



## REMOVING STOCK COMPONENTS

1

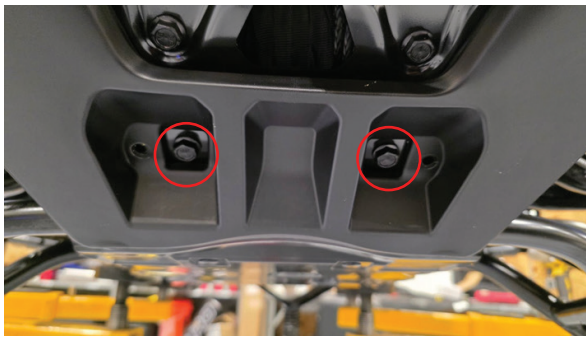


Place jack under center of ATV front end and lift until front wheels clear the ground. Be careful to support the ATV properly so that it is securely supported but so that Control arms and shocks can droop to full extension.

Remove front wheels



2



The front factory plastic bash plate will need to be loosened or removed to remove the lower control arm. The bolts you will need access to are behind the bash plate.

3



Disconnect the brake line from the upper control arm. You need to drill out each rivet until they break off.



4



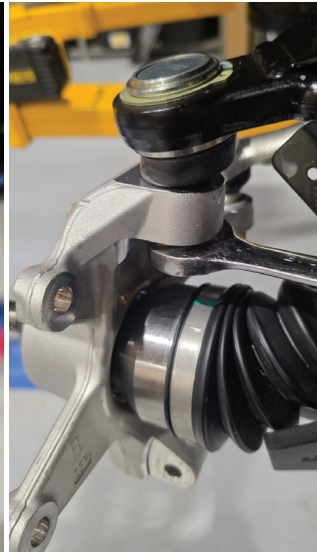
Unbolt outer tie rod link



Remove ball joint nuts



Remove hub (set aside for later)

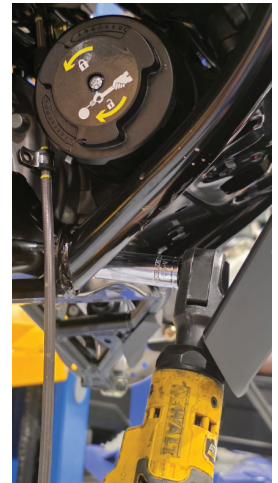


Disconnect the shock from the upper control arm and secure it out of the way.

5



Disconnect the upper and lower control arms along with the sway bar links from the frame.



6



Remove the arms



7

The next steps are attaching the new upper and lower control arms to the frame. You will need to attach all four arms to the frame before you can reattach the front deflector plate and support bracket. Insert the bolt to hold the arms in place but do not secure until all arms are in place.

8



Start with the lower control arms. Connect to the frame and then to the hub assembly using the factory hardware. When connecting to the frame you will place an alignment cone on either side of the heim joints then secure with the factory hardware.



9



Next attach the upper control arms to the frame and fasten with the factory hardware.

10



Connect the hub assembly to the new upper and lower control arms using the factory hardware.

11



Connect the sway bar link to the control arms using the factory hardware.

12



Connect the shock to the new control arms.

Reconnect rotor/hub assembly and calipers.

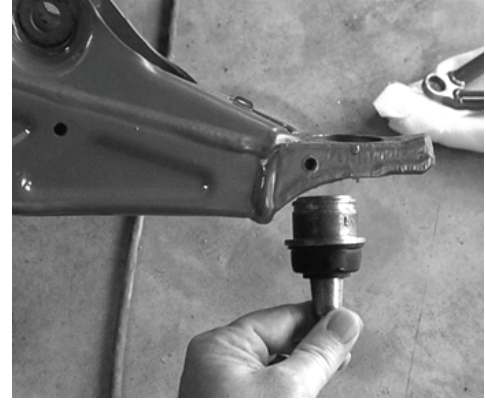
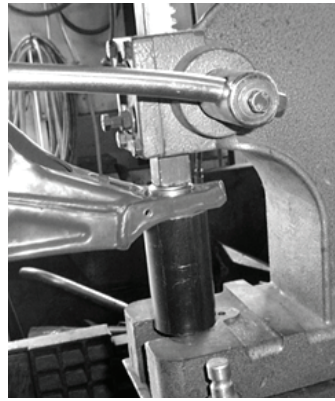
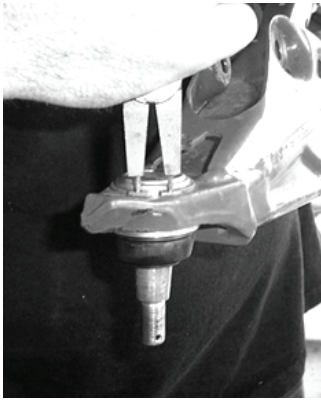
Secure all the brake lines with new brake line clamps provided in the kit



(Note: If you did not purchase the control arms with preinstalled ball joints, you will need to purchase new ball joints or use the ball joints in your factory arms. The following instructions are generic and are a guide to show how ball joints are removed and then installed.)

## BALL JOINT REMOVAL

NOTE: You need to remove the snap ring from the ball joint and use a press to remove the factory ball joints from the arms. Use a socket to allow the ball joint to be pushed through.



## BALL JOINT INSTALLATION

Reassemble the factory parts into the new control arms. Use a press to connect the ball joints into the new arms. **DO NOT USE A HAMMER!!**

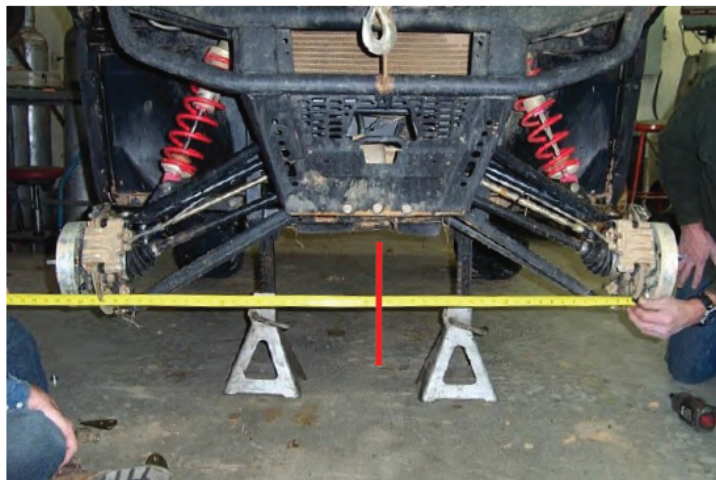


**NOTE:** A press or a vise is suggested for removing and replacing the ball joints. If you press in the ball joint crooked, **DO NOT TRY TO FORCE IT IN!** If you try to force it straight you can "egg" the opening. Press the ball joint out and reinsert it into the opening, pressing it in with a vise. 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 groove.

## FRONT WHEEL ALIGNMENT

**IF YOU HAVE ADJUSTABLE CONTROL ARMS, YOU MUST ADJUST THE CAMBER FIRST BEFORE PROCEEDING. DO NOT INSTALL WHEELS ONTO UTV UNTIL PROPER ALIGNMENT HAS BEEN ACHIEVED.**

- Straighten steering wheel
- Make sure that the brake rotors are straight to sight or level.
- Using a tape measure, measure from inside to inside on the front and back ends of the rotors.



### INCORRECT TOE

If the toe alignment is incorrect, measure the distance between vehicle center and the back of the rotors. This will indicate which tie rod needs adjustment.

### ADJUSTING TOE

- Adjust tie rods until **BOTH** measurements are the **SAME**, then adjust toe tolerance.

The recommended vehicle toe tolerance is  $1/8''$  to  $1/4''$  (3.175-6.35mm) toe out. This means the **FRONT MEASUREMENT IS WIDER THAN THE REAR MEASUREMENT.**

### TOE ADJUSTMENT CHART

TOE (Inches)	1/16	1/8	3/16	1/4	5/16	3/8
TOE (Degrees)	0.12°	0.25°	0.38°	0.51°	0.64°	0.76°

**Recommended Settings**

**TOE OUT +**



If the **FRONT OF THE WHEELS** are facing **OUT**, adjust the tie rods **OUT** or **INCREASE the length of the tie rod.**

Measurement at the front of the tires will be **GREATER** than the rear, if the **TOE IS OUT.**

**TOE IN -**



If the **FRONT OF THE WHEELS** are facing **IN**, adjust the tie rods **IN** or **REDUCE the length of the tie rod.**

Measurement at the front of the tires will be **LESS** than the rear, if the **TOE IS IN.**



**IMPORTANT NOTE:** When tightening the tie rod jam nuts, the tie rod ends must be held parallel to prevent rod end damage and premature wear. Damage may not be immediately apparent if done incorrectly.

After alignment is complete, tighten & torque tie rod end jam nuts to specifications. [12-14 ft lbs]



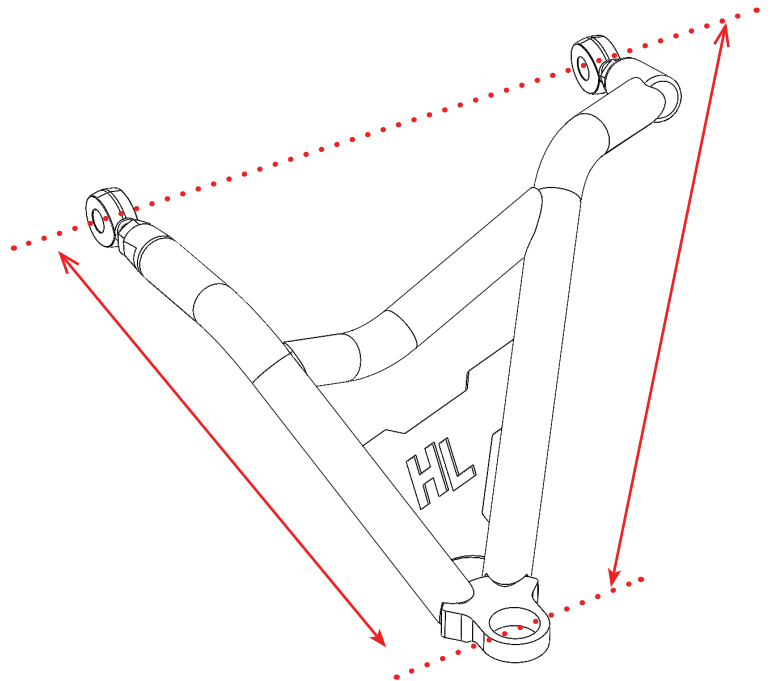
### BEFORE STARTING

- Tires must be off the ground
- Tires must have equal air pressure
- Suspension components must be completely assembled

The new High Lifter lower control arms will come pre-adjusted to factory length.

If you need to re-adjust the collars, place the factory arm and new control arm on a flat surface. Measure from eyelet to center mount on the factory arm, and then adjust the new arms to those lengths.

**NOTE:** When re-adjusting, leave the jam nuts loose. Do not fasten tight until installed on UTV, after all final adjustments have been made.



**Make all adjustments in small increments.**

Do this by disconnecting control arms at the frame and adjusting collars. Once small adjustments have been made. Take the UTV off the jack and roll it back and forth several times before checking the camber. Repeat steps as needed. After alignment is complete, tighten jam nuts to 80 ft-lbs and secure it with blue loctite.

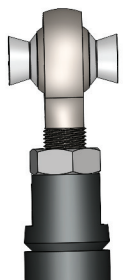
### Positive Camber

If you have a positive camber you will need to adjust the collar **OUTWARD** or lengthen the control arm. The maximum amount outward is "1.250" which could give up to 3° of negative camber.



### Correct Camber

For this application, we recommend a camber setting of 0°. Collars are preset to .937"



### Negative Camber

If you have a negative camber you will need to adjust the collar **INWARD** or shorten the control arm. The maximum amount inward is zero threads exposed and could give over 3° of positive camber.





## WARRANTY INFORMATION



### HIGH LIFTER LIMITED LIFETIME WARRANTY

High Lifter offers a Limited Lifetime Warranty to the original purchaser that our product shall be free from defects in material and workmanship for the life of the product if utilized in accordance with the manufacturer's instructions for installation and operation of said products.

#### LIMITED LIFETIME WARRANTY EXTENDS TO THE FOLLOWING PRODUCT LINES:

- Lift Kits (Signature, Standard and Big Lifts)
- Control Arms
- Trailing Arms
- Radiator Relocation Kits
- Portal Gear Lifts
- Wheel Spacers
- Tow Hooks
- Control Arm Link Kits
- Racks

Damages to vehicle or any other object during the installation, use, or removal of High Lifter products are not covered under this warranty. Normal wear items included with any of the products covered under this Limited Lifetime Warranty are excluded from coverage. These items include, but are not limited to heim joints, tie rods, bearings, bushings, seals, gaskets, zinc plating, painted and powder coated finishes. Other exclusions of coverage under this warranty include, but are not limited to: damage or product failure due to improper installation, lack of maintenance, product modification, abuse, collision or use on vehicles for which product was not designed, repairs performed by anyone other than approved High Lifter personnel or made using non-High Lifter components. This warranty is valid for the original purchaser only and is non-transferable. High Lifter reserves the right to inspect any product before determining if the claim is valid and covered under this warranty. Claims determined to be caused by reasons other than a manufacturer defect will be rejected and an estimate for repair or cost of a replacement product if a repair is not possible, will be provided.

**This warranty is exclusive** and is in lieu of any implied warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether express or implied, except the warranty of title.

#### WARRANTY PROCESSING

If you suspect your product is defective, **DO NOT disassemble the product** to determine the cause without prior approval as it may void your warranty status. This is especially true with our Portal Gear Lift. To begin the claim process, please e-mail our warranty team at [warranty@highlifter.com](mailto:warranty@highlifter.com) and include the following in the e-mail:

- Your full name, address and contact phone number
- The year, make and model of your vehicle
- The part number of the product
- Photos of the product installed, and vehicle product is installed on
- Proof of purchase (Required for all warranty claims and you must be the original purchaser)

Once a claim is created, you will receive a return authorization number (RMA). Write this number on the outside of the box containing your defective product and include it along with your name and contact information inside the box. Product must be returned in the original box or a box of equal strength and packaging. Product sent without an RMA number visible on the outside of the box or sent COD will be refused. Ship your product to the following address:

High Lifter Products  
Attn: Returns 7455 Atkinson Dr, Shreveport, LA 71129

Once your product is received, we often have your replacement or repaired product shipped back to you within 3-business days of receiving it. Please note that **High Lifter is not responsible** for shipping charges on product returned for warranty or repair, including duties and fees required by those residing outside the United States.