

CAL-F-C1D | CAL-F-C1D-HD

Can-Am Defender Front Control Arm Link Kit



Parts Available For These Popular Brands and Others

POLARIS

can-am



Kawasaki



HIGHLIFTER



sales@highlifter.com



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



7455 Atkinson Drive, Shreveport, LA 71129



www.highlifter.com

PRODUCT DISCLAIMER

The installation of products sold or manufactured by High Lifter Products, Inc. including, but not limited to suspension components such as lift kits, gear reduction lifts, frame stiffener kits, snorkels, and tires that exceed the original specifications for the vehicle, may change the vehicle's center of gravity and handling characteristics both on- and off-road. You are aware that the installation of tires that are larger than original vehicle specifications may reduce the effectiveness of the braking system. Use of these products may place added stress to the original factory vehicle components which could cause them to weaken or possibly fail.

Products sold or manufactured by High Lifter Products, Inc. are intended for off-road use only. Operation of a vehicle modified with these products on a road could result in serious bodily injury or death, and such operation may violate the laws of your state or municipality. You agree to operate your vehicle exclusively in the manner intended by the vehicle manufacturer. You agree that failure to safely and reasonably operate your vehicle could result in serious bodily injury or death, and that, as a result of installation of this product(s) to your vehicle, extreme care must be taken to prevent vehicle rollover or loss of control, which may be more likely to occur as a result of said modifications. You will avoid unsafe maneuvers, including sudden sharp turns or other abrupt maneuvers, which could make a vehicular accident more likely. You understand that High Lifter Products, Inc. is not responsible or liable for any damages or any injuries to yourself or your passengers that could occur upon possible accidents due to driver error, incorrect installations, bad judgment, incompatibility with other aftermarket accessories or natural disasters to the fullest extent allowable by law.

You will have all vehicle occupants fasten seatbelts, if equipped, and wear proper safety equipment, such as DOT approved helmet and eye protection prior to operating the vehicle. You understand and acknowledge that failure to wear proper safety equipment may increase the risk of serious bodily injury or death to yourself and any passengers.

Proper installation of products sold or manufactured by High Lifter Products, Inc. requires knowledge of the factory recommended procedures for removal and installation of original equipment components. Installation of these products without proper knowledge and experience may affect the performance of these components and the safety of the vehicle and cause serious bodily injury or death. It is strongly recommended that a certified mechanic familiar with the installation of similar components perform the product(s) installation.

Prior to installing any products sold or manufactured by High Lifter Products, Inc., you will perform or cause to be performed an inspection of their vehicle to confirm its condition is suitable for the installation of these products. A proper inspection of the vehicle includes confirmation that the vehicle has not been in a collision and is free of corrosion. If the vehicle is suspected to have been in a collision or misused, or is otherwise unsuitable for modification, you will not install the product(s). You will continue to inspect the vehicle prior to each use to confirm its condition is suitable for its intended use, and you acknowledge that the failure to do so may result in serious bodily injury or death, as well as damage to the vehicle itself.

You will install any warning labels provided with the product so it may be prominently seen by yourself and all passengers. You will notify all passengers of the modifications performed to your vehicle prior to operation.

Insurance companies may handle coverage of a modified vehicle differently. Please check with your insurance carrier prior to modifying the vehicle to ensure your coverage remains sufficient.

Installation of this product(s) may void your vehicle warranty. If this is a concern, please check with the manufacturer or dealer before purchase or installation of this product(s).

HIGHLIFTER

PARTS DIAGRAM

PLATES (CALBOX-F-P006-B1)



122J-L
Front LEFT
Mounting Plate
(1ea)



122J-R
Front RIGHT
Mounting Plate
(1ea)



MCS830
8mm x 30mm
Bolt (8ea)



MLW8Z
8mm Lock
Washer (10ea)



FW14Z
1/4 Flat
Washer (10ea)



HC812234Z
1/2" x 2- 3/4 Bolt
(4ea)



30P
3/16 Pop Rivet
Tool (14ea)



MFW12
12mm Flat
Washer (8ea)



NLN12
1/2 Lock Nut
(4ea)



HL-TOOL-RN
8mm Rivet
Hand Tool
(1ea)



RNSZ8
8mm Rivet nut
(12ea)

LINK BARS (CALBOX-AL-001-B2)



111P
Outer Bar
(2ea)



111J
Inner Bar
(2ea)



SSS14316FZ
1/4-20 x 3/16
Set Screw
(2ea)



18D
Right Hand
Heim Joint (2ea)



JN58F
5/8 Right Hand
Jam Nut (2ea)



96P
Left Hand
Heim Joint (2ea)



LJN58F
5/8 Left Hand
Jam Nut (10ea)



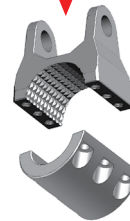
96Q
5/8 Misalignment
Bushing (8ea)

CLAMPS (CALBOX-CC-001-B3)(1.25) (CALBOX-CC-002-B3)(1.5)

97N
1.25" Clamp
Collar Saddle
(2ea)



97o
HD 1.5" Clamp
Collar Saddle
(2ea)



96T
1.25" Clamp
Collar Face
(2ea)



96V
HD 1.5" Clamp
Collar Face
(2ea)



SCS1434Z
1/4-20 x 3/4
Allen Head
Socket Bolt
(12ea)

SSS1438Z
3/8 Set Screw
(16ea)

REQUIREMENTS BEFORE INSTALLATION

- The standard 1.25" clamps require a forward arm kit with 1.25" tubing. The HD 1.5" clamps require a forward arm kit with 1.5" tubing.
- All Can-Am Defenders require a 3" or greater lift kit.
- This kit will work with High Lifter Big Lift Kits **ONLY**.
- Steering stops are a requirement, no matter what lift kit, big lift kit, or forward arms are installed on the UTV.

REMOVING STOCK COMPONENTS

Plastic



If there is not enough clearance to work under the UTV, jack up the front, so the jack doesn't interfere with the skid plate removal or link bar install.



Remove side rock guards from UTV.



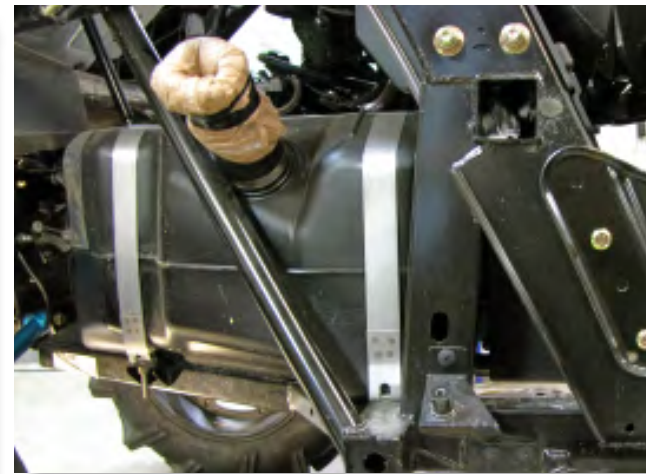
Remove side plastic pieces/fenders.



2



On passenger side, loosen the metal clamp securing the filler neck to the gas tank; then remove the fender.



IMPORTANT: SEAL THE OPENING TO PREVENT DEBRIS FROM ENTERING THE GAS TANK.

SKID PLATE

Removal

3



The skid plate rivets will need to be drilled off for removal, using a 3/16 drill bit.



Remove the two lateral skid plates.

TIP: Use a flat head screw driver to hold tension between the skid plate and rivets.

4

4



Align correct frame plate to the correct side.

Start with just one hole. Using a 17/32 or 9/16 drill bit, drill out and widen the factory rivet hole on the frame.



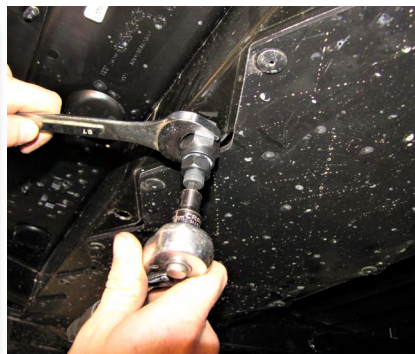
PLATE INSTALLATION

Inserting Frame Rivets

5



If not already done, Insert the 8mm bolt into the rivet nut hand tool. Thread a rivet nut onto the bolt all the way down.



Insert the rivet nut into the drilled hole. Use a 7/8 wrench to hold the tool in place.

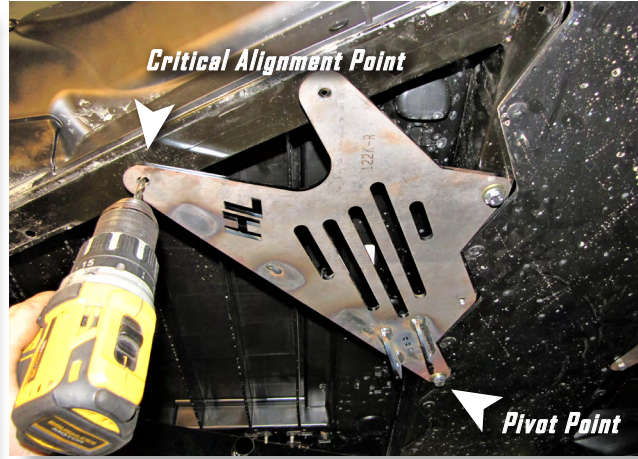


Use a 11/16 wrench to turn the nut clockwise. This will secure the rivet nut to the frame. Turn until **SNUG**. Use a 6mm hex key to loosen the bolt from the rivet.

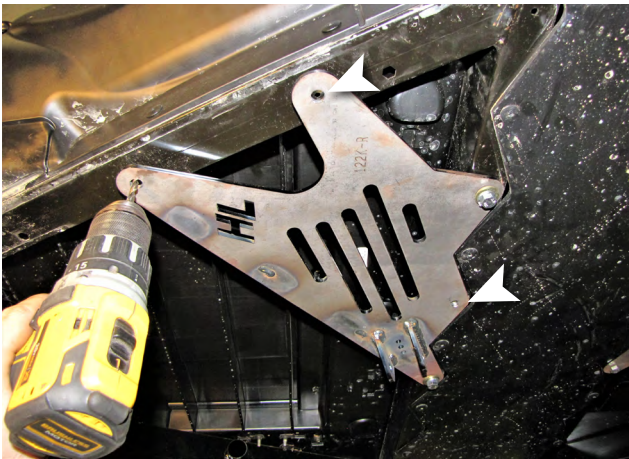
6



Slide an 8mm lock washer, and 8mm flat washer, onto a 8mm x 30mm bolt. Insert the bolt through the frame plate and into the rivet nut, then hand tighten.



Again, align the frame plate holes with factory rivet holes. Using a 5/16 drill bit, drill through your frame plate and into the factory rivet hole to widen it. This next hole must stay aligned and riveted to prevent the other holes from being off.



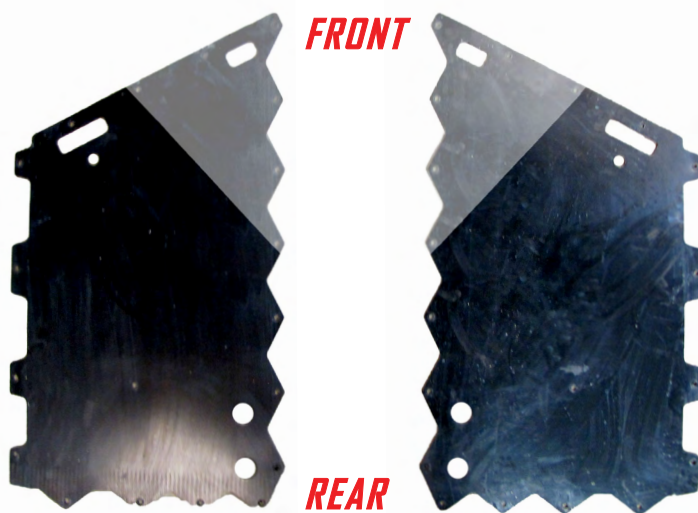
Using a 17/32 or 9/16 drill bit, drill out and widen the remaining 5/16 holes. Install a rivet nut.

Slide a 8mm lock washer, and 8mm flat washer, onto a 8mm x 30mm bolt. Insert the bolt through the frame plate and into the rivet nut and hand tighten. Repeat this with the remaining holes.

REPEAT STEPS ON OPPOSITE SIDE



7



NOTE: You have two options for the factory skid plate

- a) Remove the factory skid plate and not reinstall. Many mud riders do this.
- b) Use the plate as a template and cut out the entire opening for the control arm link plate.

8



If reinstalling skid plates, use 3/16 pop rivets. Use a standard rivet gun or tool to secure them.

9



Insert the **LEFT-HAND heim joint 96P** and **LEFT-HAND jam nut LJN58F** to the outer bar. Leave about $\frac{1}{4}$ " of thread exposed for final adjustments.



Insert (2) alignment cones **96Q** into to the eyelet of the heim joint.

**Outer Bar
111P**



**Inner Bar
111J**



The bars are made up of two separate parts that are threaded together. An Outer (hollow) bar that is painted black and an inner (threaded) bar that is zinc plated. The larger black outer bar will connect to the frame plate.

NOTE: All bars are shipped with marine grade grease or lubricant on the threads.

Lubrication of the threaded portions are key to the proper function of the bars. The bars should be serviced during regular oil changes or when the unit is being serviced. Regular checks and services will keep the bars functioning properly. Make sure to use a quality marine-grade grease to lubricate the threads on the bars to prevent them from seizing up.

10



**Outer Bar
111P**



Connect the outer bar heim joint to the plate tabs with the $\frac{1}{2}$ " x 2-3/4" bolt, then place the 12mm flat washer over it. Secure it with a 12mm flat washer and 1/2" lock nut. Torque nut to 110lb-ft. Repeat on other side.

11



loosely snug bolts in zig-zag pattern

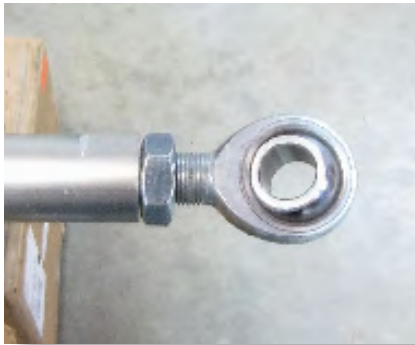


Loosely connect the **clamp collars** onto the lower control arm. Connect it at the lowest point possible on the arm using the ¼ - 20 x ¾" socket head bolts.

NOTICE: YOU WILL NEED TO ADJUST COLLARS LATER, SO LOOSELY FASTEN. DO NOT TIGHTEN ALL THE WAY.

When clamping the collars to the lower control arms you want to be as far down on the arm as you can, while also not interfering with the turning of the wheels and movement of the control arm bars. When the wheel is at full turn you don't want to hit the bar and when the shock is at full compression you don't want the bar to hit the frame.

12



Inner Bar 111J

Insert the **RIGHT-HAND** heim joint 18D and **RIGHT-HAND** jam nut JN58F to the bar. Leave about ¼" of thread exposed for final adjustments.

The smaller inner bar will connect to the collars.



Adjust the inner bar, so that the heim joint will reach the clamp collar tabs.



Insert (2) alignment cones 96Q into to the eyelet of the heim joint.

13



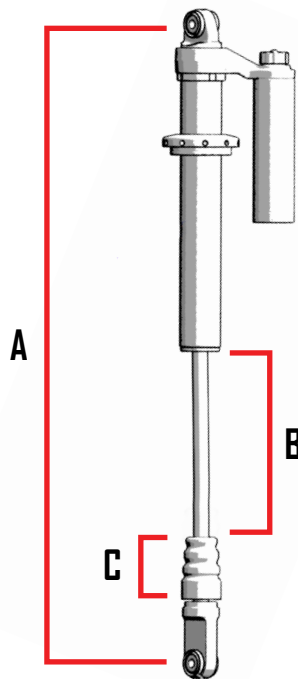
Connect the heim joint on the inner link bar to the collar on the control arm. Slide a 12mm flat washer onto a 1/2" x 2-3/4" bolt. Insert it through the clamp collar and heim. Secure it with a 12mm flat washer and 1/2" lock nut. Torque nut to 110lb-ft. Repeat on other side.

14



Remove the shock from the UTV.

IMPORTANT NOTICE: USE THE CHART TO RECORD THE FOLLOWING MEASUREMENTS.



NOTE: DO NOT remove the spring, this is to illustrate areas to measure.

Block A Measure the shock length from eye to eye.

Block B Measure the length of the exposed shock shaft (between bump stop and shock body)

Block C Measure the height of the bump stop, divide it by 2.

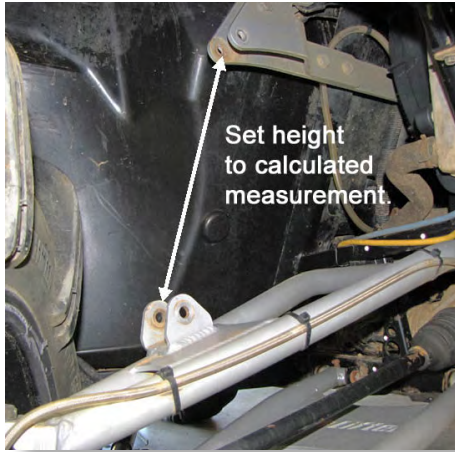
Take the A and subtract B & C. This will equal what the shock will be at full compression.

USE FORMULA PROVIDED TO DETERMINE THE FULL COMPRESSED LENGTH

A-B-(C÷2) = Compressed Length

POSITION	PART TO MEASURE	LENGTH
A	Shock Length	
B	Shock Shaft	-
C	Bump Stop ÷ 2	-
Total Compressed Length ----->		=

15



While the shock is off the bike, lift the control arms until the measurement from the **shock frame mount to the shock control arm mount** is the length previously calculated.

Use a jack stand, or a friend to hold the arm in place to situate the link bar close to the frame, ensuring it does not touch.

16



To achieve proper clearance from the tire and frame, adjust the link bars, slide the clamp up and down on the control arms, and rotate the collar, until clearances are met.

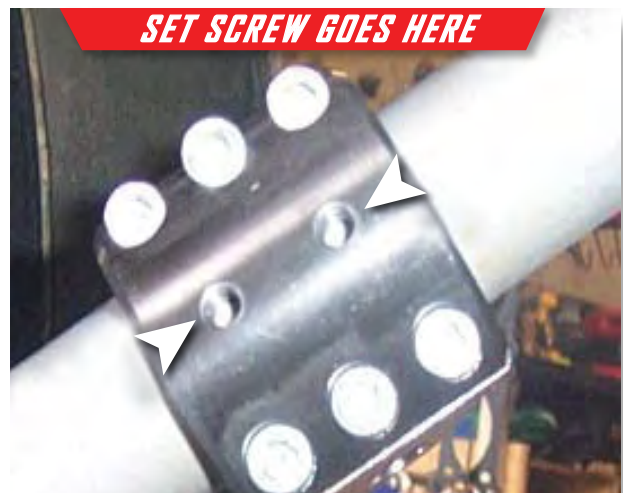
tighten bolts in zig-zag pattern



Once Proper clearance is achieved, torque the $\frac{1}{4}$ -20 x $\frac{3}{4}$ " socket head bolts to 12lb-ft



Install the $\frac{1}{4}$ - 28 x $\frac{3}{16}$ " set screw located on each (hollow) bar. Make sure that it is tight so that the bars will not rotate during use. **DO NOT OVER TORQUE.**



Install the two $\frac{1}{4}$ -20 x $\frac{3}{8}$ " set screws located on each clamp collar. Make sure that the set screws are tighten so that the collars cannot move during use. **DO NOT OVER TORQUE.**



Once you have repeated the steps on the opposite side, place the wheels back on the vehicle and lower the jack, then inspect the vehicle.

TORQUE ALL BOLTS TO FACTORY SPEC

HIGHLIFTER



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

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 warrantycare@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, Inc.

Attn: Returns 7455 Atkinson Drive, 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.

**THANK YOU FOR CHOOSING
HIGHLIFTER**

OBTAINING A WARRANTY CLAIM

All returns for warranty must be pre-approved by calling **1.800.699.0947**. After warranty approval has been granted and a Return Merchandise Authorization (RMA) number issued, the product must be received by **HIGH LIFTER PRODUCTS** within **15 calendar days**. The RMA number must be clearly displayed on the return box or the return will be refused. An RMA number does not imply a replacement or refund on any product, but only that we will inspect the product for warranty claims. For orders outside the United States, any fees associated with customs or duties are non-refundable. All claims must be accompanied by the sales receipt detailing date and place of purchase, a written explanation of the problem, a phone number, and e-mail address. **A copy of this receipt must be included with the product submitted for warranty repair or replacement. The purchaser is responsible for any freight charges on a warranty claim or repair service after the warranty expires, including incoming freight to High Lifter and return freight to the purchaser.**



HIGH LIFTER PRODUCTS WARRANTY CLAIM

Name: _____

Product Number: _____

Address: _____

Place of Purchase: _____

Date of Purchase: _____

Phone Number: _____

Reason for Return: _____

E-Mail Address: _____

Reminder – This claim must be accompanied by a copy of the original receipt.

