

CAL-R-C1D | CAL-R-C1D-HD

Can-Am Defender 1000 Rear 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

IMPORTANT PRODUCT USE AND SAFETY INFORMATION / WARNINGS

This product is designed for use on ATVs and/or RUVs to lower the final drive gear ratio and increase ground 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 with this product.

High Lifter's products are designed to best fit user's 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.

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 the side of 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 and passengers to the risk of serious bodily harm or possible death. This risk is compounded if the riders do not wear an approved helmets 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.

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.

HIGHLIFTER

PARTS DIAGRAM

PLATES (CALBOX-R-P003-B1)



124E-L
Rear Left
Mounting Plate
(1ea)



124E-R
Rear Right
Mounting Plate
(1ea)



135T
Battery Bracket
(1ea)



MCS830
8mm x 30mm
Bolt (8ea)



MCS655
6mm x 55mm
Bolt (1ea)



MCS625
6mm x 25mm
Bolt (2ea)



MFW6
6mm Flat
Washer (3ea)



FW14Z
1/4 Flat
Washer (8ea)



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



NLN12
1/2 Lock Nut
(4ea)



MFW12
12mm Flat
Washer (8ea)



MLW8Z
8mm Lock
Washer (8ea)



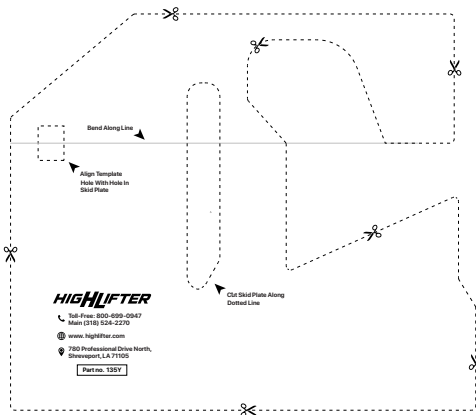
30P
3/16 Pop Rivet
Tool (14ea)



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



RNSZ8
8mm Rivet nut
(10ea)



135Z
Template
(1ea)

LINK BARS (CALBOX-AL-003-B2)



124L
Rear Link Bar
(2ea)



18D
5/8 Right Hand
Heim Joint (4ea)



JN58F
5/8 Right Hand
Jam Nut (4ea)



96Q
5/8 Misalignment
Bushing (8ea)

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



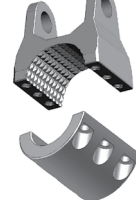
SCS1434Z
1/4-20 x 3/4
Allen Head
Socket Bolt
(12ea)

97N
1.25" Clamp
Collar Saddle
(2ea)



96T
1.25" Clamp
Collar Face
(2ea)

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



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

REQUIREMENTS BEFORE INSTALLATION

- This kit will work with High Lifter Big Lift Kits **ONLY**.
- This kit **ONLY** works on 2020+ models

REMOVING STOCK COMPONENTS

Plastic & Battery Cover



If there is not enough clearance to work under the UTV, jack up the unit and secure it in a way so that the jack doesn't interfere with the skid plate removal or link bar install.

PASSENGER SIDE



Remove plastic cover located in the floorboard of the cab.

REMOVING STOCK COMPONENTS

Battery



Remove battery cover from under the passenger side seat, disconnect clips/ battery wires, then disconnect the battery and set it aside.



Disconnect the starter relay.

3



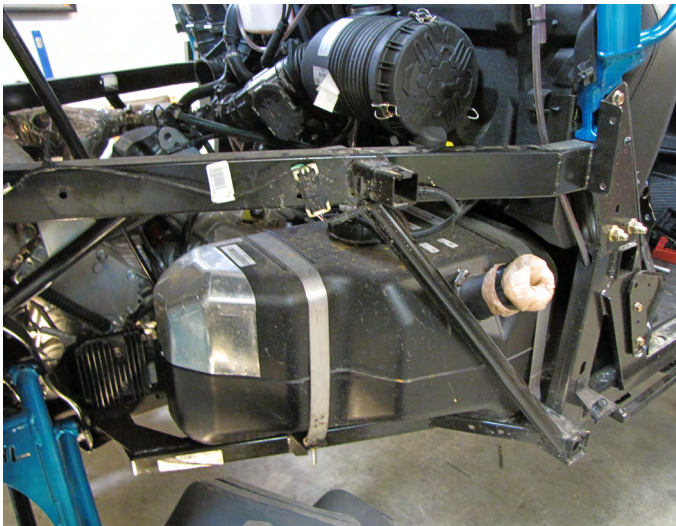
The skid plate rivets will need to be drilled off for removal, using a 3/16 drill bit.



Remove the two lateral skid plates.

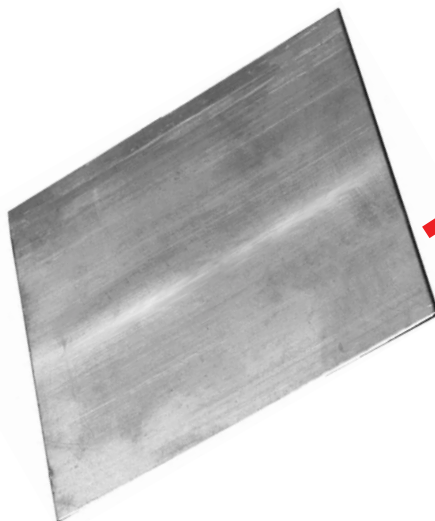
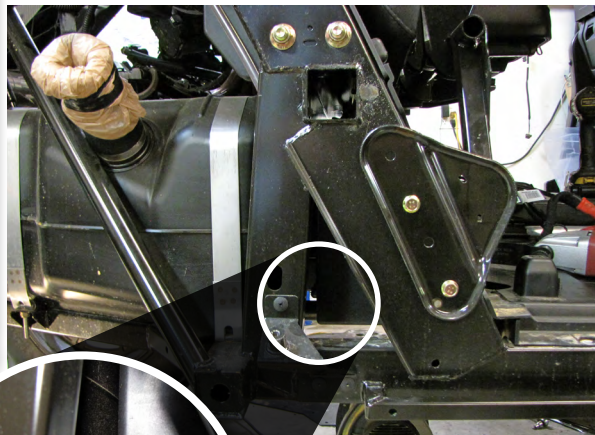
TIP: Use a flat head screw driver to hold tension between the skid plate and rivets.

4



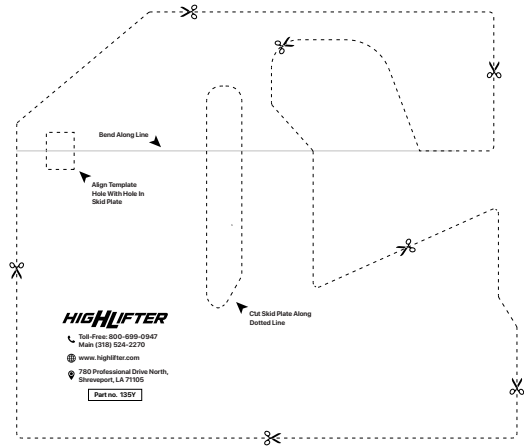
WARNING

To prevent damage to the fuel tank, either remove it completely or place a thick sheet of metal between the tank and the cab.



5 PASSENGER SIDE

Once the battery is removed, use the **135Z** template as a guide to cut through the plastic floor board, where the battery previously was.



INSIDE CAB



Cut out the template (**135Z**) on the dotted lines, then place the template on the floor board inside of the cab, where the battery was located. Then using a marker, mark off the empty spaces.



Use an oscillating tool, or something similar, to cut the plastic. **BE EXTREMELY CAUTIOUS NOT TO CUT THE GAS TANK. USE THICK METAL OR WOOD TO AVOID DAMAGING THE FUEL TANK.**



UNDER VEHICLE

This will be the location where the rear plate **124E-R** will be mounted.

6



Ensure the rear mount plate (124E-R) has enough clearance to mount to the frame.



Align the correct frame plate to the corresponding 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 **bottom left hole on the frame**. Use the plate as a guide to line up the holes correctly.

7



If not done already, 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.

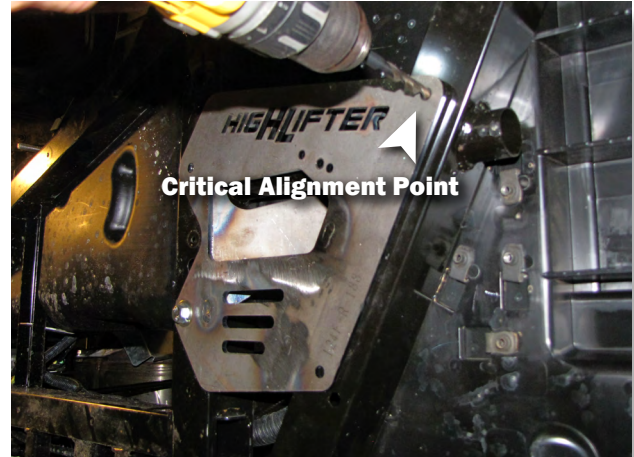


Use a 11/16 wrench to turn the nut clockwise. This will secure the rivet nut to the frame. Turn until **SNUG**. Once the rivet is pressed in, remove the tool.

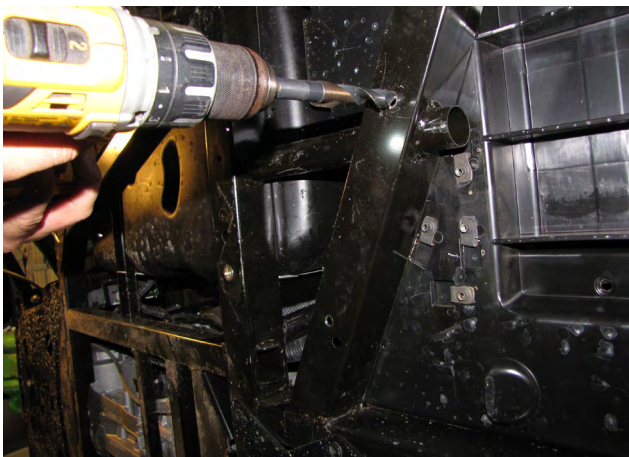
8



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.

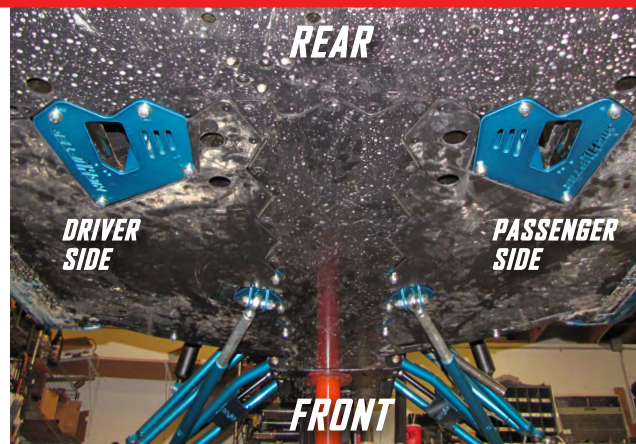


Using a 17/32 or 9/16 drill bit, drill out and widen the remaining 5/16 holes. Install a rivet nut.



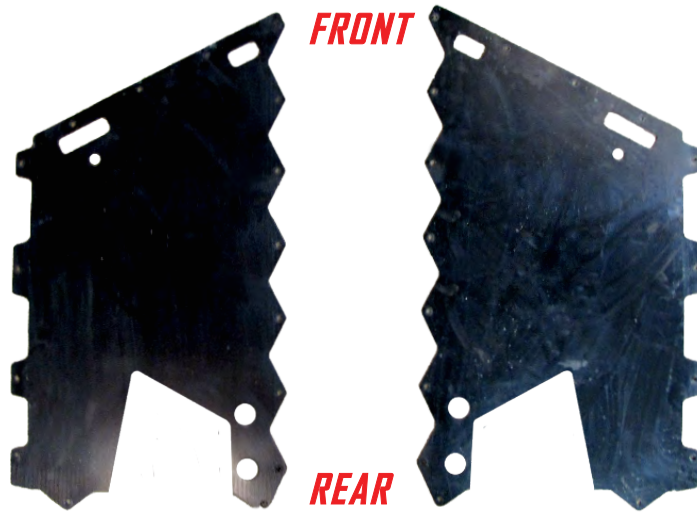
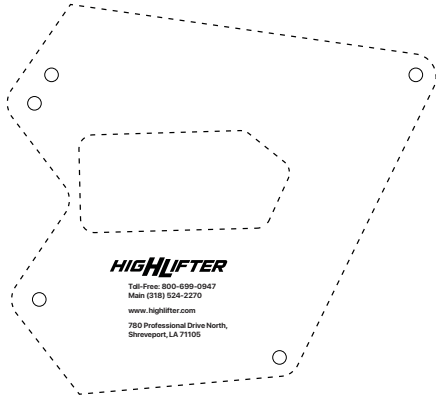
Slide a 8mm lock washer, and 8mm flat washer, onto a 8mm x 30mm bolt. Insert the bolt through the frame plate and into the rivet nut and hand tighten. Repeat this with the remaining holes.

REPEAT STEPS ON OPPOSITE SIDE



9

WE RECOMMEND REMOVING THE SKID PLATE COMPLETELY.



If you choose not to remove your skid plate, use the mounting plate as a guide to cut access holes for the link bar. Do this by placing the skid plates frame side down and tracing the plate.

The plate will need to be between the 1st and 2nd skid plate holes on the rear. Use a tool to cut the skid plate.

NOTE: You have a couple options for the factory skid plate

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

10



Insert the 8mm bolts and fasten them to the frame plate.

Insert the provided 3/16 pop rivets into the remaining skid plate holes. Use a standard rivet gun or tool to secure them.

OUTER LINK BAR

Heim Joint

11



REAR LINK BAR 124L
PLATE END

Insert the **RIGHT-HAND heim joint 18D** and **RIGHT-HAND jam nut JN58F** to the 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.

LINK BAR

Plate Tabs

12



PLATE END

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

13



Once the plastic has been cut, place the battery back in the vehicle and use the battery bracket (135T) to secure it in place . Fasten with the 6mmx55mm bolt and 6mm flat washer provided in the kit.

LEFT SIDE (-)



On the top left side of the battery, you will need to flatten the (-) tab and remount it.

RIGHT SIDE (+)



On the top right side of the battery, you will need to remount the (+) tab.

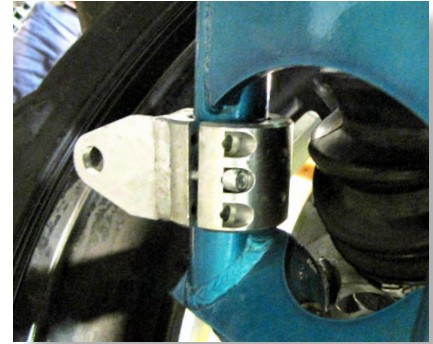


On the right side of the battery plate there is a mount tap. Slide (2) 6mm flat washers over (2) 6mmx25mm bolts and secure them to the solenoid.

14



Loosely snug bolts in zig-zag



Loosely connect the clamp collars onto the lower control arm. Connect it at the lowest point possible on the arm using the $\frac{1}{4}$ - 20 x $\frac{3}{4}$ " 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 shock is at full compression you don't want the bar to hit the frame.

INNER LINK BAR

Helm Joint

15



Insert the **RIGHT-HAND** heim joint 18D and **RIGHT-HAND** jam nut JN58F to the bar. Leave about $\frac{1}{4}$ " of thread exposed for final adjustments.



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.

16



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.

CLEARANCE CHECK

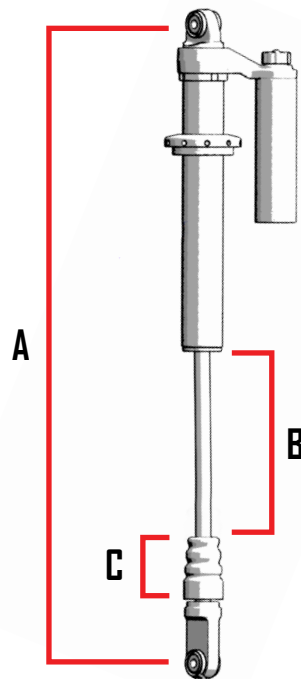
Shock

17



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) Ensure that the bump stop is all the way to the bottom of the shaft.

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

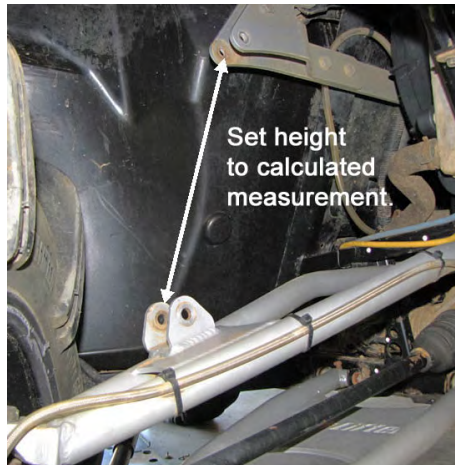
Take the A and subtract B & C. This will equal what the shock will be at full compression.

USE FORMULA PROVIDED TO DETERMINE THE FULL COMPRESSED LENGTH

$$A - B - (C \div 2) = \text{Compressed Length}$$

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

18



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.

19



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.



Once Proper clearance is achieved, torque the **1/4-20 x 3/4"** socket head bolts to **12lb-ft**

Tighten bolts in zig-zag pattern

SET SCREWS GO HERE



Located on each clamp collar are two **1/4-20 x 3/8"** set screws. Make sure that the set screws are tighten so that the collars cannot move during use.



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



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 HIGH LIFTER

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.

