## **Installation Instructions**

Gorilla-Lift Trailer Tailgate Lift Assist Model # 40101042G

Call 1.877.388.8895 if you have any questions or installation difficulties.

### ! WARNING

Always pin, latch or lock the tailgate in its upright position; this product is <u>not</u> a substitute for always doing so. This product does not make the tailgate weight bearing; the opened tailgate must always rest on firm ground.

Never raise or lower the tailgate while anyone or anything is under the tailgate.

Keep hands away from all openings, rollers or cables when product is in use.

# ! CAUTION

Due to the many different sizes, weights and designs of trailers and tailgates on the market today, some minor adjustments may be necessary to insure your Gorilla-Lift works properly. *Extreme caution must be taken, after the initial installation of your Gorilla-Lift, to insure that it is working properly.* Check to make sure there is not too much or too little tension on your tailgate. Never force the tailgate up or down, it should travel with very little effort in both directions. *Always make sure that the rollers are turning freely, and that the cable travels in the grooved portion of the rollers as it operates.* Please call our service department, toll free, at 1-877-388-8895 or visit our web site at www.Gorilla-Lift.com, if you have any questions or problems with installation.

### Thank you for purchasing our product!

If you have any trouble with installation, are missing any parts or have any other questions, please call our customer service department, toll free, at 1.877.388.8895 or visit our web site at www.Gorilla-Lift.com. Please, do not return to the store where you purchased the product, because they cannot help you.

<u>Parts</u> <u>List</u>		<u>Quantity</u>
A.	housing with an angle cut on one end	2
B.	housing with square cuts on both ends	2
C.	5/16-inch x 2 1/2-inch mounting bolt	8
D.	5/16-inch flat washer	8
E.	5/16-inch flanged lock nut	8
F.	spring/cable assembly	2
G	1/2-inch clevis pin	2
H.	1/2-inch rue locking ring	2
I.	grooved roller	4
J.	1/4-inch clevis pin	4
K.	1/4-inch flat washer	8
L.	1/4-inch rue locking ring	4
M.	1/2-inch x 5 1/2-inch gate attachment bolt	2
N.	1/2-inch flanged lock nut	4
Ο.	1/2-inch flat washer	8

#### Tools Required

- Measuring Tape
- 1/2-inch wrench
- Marker or punch
- 3/4-inch wrench
- Heavy Duty Power Drill
- Adjustable wrench
- 1/2-inch metal drill bit
   Needle nose pliers or leatherman tool

### Before beginning this installation, read the instructions thoroughly and

always make sure that the trailer's tailgate is pinned, latched or locked when in its upright position.

## Step 1, Attaching to the top of the trailer's side rails:

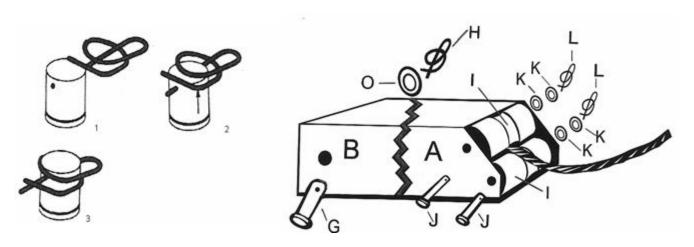
- 1) Important, begin with the driver's side of the trailer.
- 2) Place and align housing A (the one with a website sticker) & housing B (the one with a Gorilla-Lift sticker) on top of the trailer's side rail. Square and align the bottom edge of Housing A's angled end with the rear edge of the trailer's side rail. Make sure that the stickers are lined up on the same side and facing to the outside of the trailer; that the housings are straight and tight against each other; and that you are working on the driver's side of the trailer.
- 3) Remove housing A from the side rail without disturbing the placement of housing B. Mark the center of housing B's mounting holes. Replace housing A onto your side rail without disturbing the placement of housing B. Remove housing B without disturbing the placement of housing A. Mark the center of housing A's mounting holes. Drill 1/2-inch holes down through the side rail where you made your marks.
- 4) Insert the 5/16-inch x 2 1/2 -inch mounting bolts through the mounting holes at the ends of housings A & B where they come together. Place the Housings back on the rail, while guiding the 5/16-inch x 2 1/2-inch mounting bolts through the appropriate 1/2-inch holes you just drilled into the side rail. You must make sure that the mounting bolts are seeded all the way down into their square holes and that they remain seeded when connecting and tightening to the side rail; the oversized 1/2-inch holes that you drilled will allow you to do this. If you do not follow this step, damage may occur to the springs.
- 5) Make sure, that housings A & B are straight, even and tight against each other and that the stickers are still aligned on the same side and facing to the outside of the trailer.
- 6) Insert the 5/16-inch x 2 1/2-inch mounting bolts through the mounting holes on the other ends of housings A & B and through the 1/2-holes you just drilled into your side rails. Then, put on and securely tighten the 5/16-inch flat washers and 5/16 flanged lock nuts, in that order, to all the mounting bolts. Again making sure that housings A & B are straight, even and tight against each other and the mounting bolts are seeded all the way down into their square holes before securely tightening all the mounting bolts.
- 7) We recommend putting a very thin bead of clear silicone caulk where housings A & B connect.
- 8) Repeat step 2 through 7 to mount the Gorilla-Lift housings on the trailer's other side rail.

#### Step 2, Installing the spring/cable assemblies:

- 1) Slide a spring/cable assembly into housings A & B, so that the springs are at the end of housing B and the cable is coming out Housing A's angled end.
- 2) Insert a 1/2-inch clevis pin into the rear hole of housing B; then run it through the looped ends of both the inner and outer springs and out the other side of the housing. Be sure you run the pin through the looped ends of both the inner and outer springs. Slide a 1/2-inch flat washer onto the clevis pin; then by using the needle nose pliers, secure the clevis pin with a 1/2-inch rue locking ring. See figure 1 on page 2.
- 3) Repeat steps 1 through 3 to install the other spring/cable assembly.

FIGURE 1, rue ring assembly

FIGURE 2, roller assembly



### Step 3, Installing the rollers:

see figure 2

- 1) Insert a 1/4-inch clevis pin into the top hole at Housing A's angled end; then run it through a roller and out the side of the housing. Make sure the cable is lying under this roller.
- 2) Slide two 1/4-inch flat washers onto the clevis pin; then, using the needle nose pliers, secure the clevis pin in place with a 1/4-inch rue locking ring. See figure 1 on page 2. You must use two flat washers on this clevis pin to secure it properly.
- 3) Raise the cable and place a roller under it allowing the cable to rest in the groves; then insert a 1/4-inch clevis pin into the bottom hole at the angled end of housing A; next run it through the roller that you just positioned and out the other side of the housing.
- 4) Slide two 1/4-inch flat washers onto the clevis pin; then, using the needle nose pliers, secure the clevis pin in place with a 1/4-inch rue locking ring. See *figure 1 on page 2*. You must use two flat washers on this clevis pin to secure it properly.
- 5) Make sure that both rollers spin freely and that the clevis pins remain stationary. You will want to double check this after the cables are attached to the tailgate and you are operating the Gorilla-Lift.
- 6) Repeat steps 1 through 5 to install the rollers on the other side.

#### Step 4, Attaching to the trailer's tailgate

For standard height side rails, 12 to 15 inches tall:

1) Measure the complete height of your tailgate. Using the chart below as a guide, measure from the rear, top edge of your side rail up along the side of your tailgate and make a mark. You will make this mark on whichever side of the tailgate's side support angle/tube, that when the cable is attached to the tailgate, will allow the cable to pull out of the housing and through the rollers in a straight line; will allow the cable to travel in the grooved portion of the rollers; and will not allow the cable to come in contact with the housing or anything else as it operates.

### tailgate height & construction tailgate attachment point from the top of side rail

4 feet, angle 17 1/2-inches
4 feet, tubing 22 1/2-inches
5 feet, angle 26-inches
5 feet, tubing 28-inches
6 feet, angle/tubing 29 1/2-inches

- 2) Drill a 1/2-inch hole through the gate's side support angle/tube, where you made your mark.
- 3) Slide a 1/2-inch flat washer onto the 1/2-inch x 5 1/2-inch gate attachment.
- 4) Slide the cable thimble onto the 1/2-inch x 5 1/2-inch gate attachment bolt.
- 5) Put one of the 1/2-inch flanged locking nuts, smooth end first, onto the 1/2-inch x 5 1/2-inch gate attachment bolt and tighten the nut to the end of the threads. Then, put on one of the 1/2-inch flat washers onto the bolt.
- 6) **Two people may be necessary for steps 6 and 7.** Insert the gate attachment bolt into the hole that you just drilled through the gate's side support angle/tube.
- 7) Slide the other 1/2-inch flat washer onto the bolt. Then, put on the other 1/2-inch flanged lock nut, flanged side first, and tighten securely to the gate. The flanged locking side of the two nuts should now be in contact with the two flat washers, sandwiching your gate's side support angle/tube between them.

8) Repeat steps 1 through 7 on the other side of your tailgate.

For 24 inch tall side rails:

Initially, you can only attach the cable high enough on both sides of your tailgate to take all the slack out of the cable.

The Gorilla-Lift should now hold most standard tailgates stationary at any position and travel up and down with very little effort. If it does not, you must increase or decrease the tension, by raising or lowering the attachment points on your tailgate. Never force the tailgate in either direction!

## **Trouble Shooting:**

- 1) If you are having trouble putting the rue locking rings on the clevis pins,
  - be sure you are using needle nose pliers, and as you are pushing the ring on the pin gently rock it back and forth.
- 2) If a roller is not spinning freely,
  - check and see if there are metal burrs or slivers inside the housing that the rollers could be catching on and file them down smooth.
- 3) If your tailgate and/or equipment are rubbing against or hitting the rue locking rings and clevis pins,
  - change the direction of your pins to where the rue locking rings are on the opposite side of the housing.
- 4) If there is too much tension on your tailgate,
  - lower the point at which you have the cable attached to your tailgate a few inches, but never low enough to allow any slack in the cable.
- 5) If there is **significantly** too much tension on your tailgate and/or it will not lower all the way down or stay down,
  - put your tailgate in the upright position and lock, pin or latch it to secure it there.
  - disconnect the cables from the tailgate.
  - > take the pins which are connecting the springs to the housings out, and disconnect the smaller inner springs from these pins.
  - reattach the larger springs to the pins while pushing the smaller inner springs out of the way, then place the pins back into their original positions and secure. After you make this adjustment, you made need to change your gate attachment position.
  - ➤ If this corrects your problem, you should remove the inner springs completely, leaving the larger outer springs to do their job. Use heavy duty wire cutters to cut and remove them from the cable thimbles; then slide them out.

## Required Initial and Monthly Inspections:

- 1) Make sure that the cable is pulling out of the housing and through the rollers in a straight line; that it is traveling in the grooved portion of the rollers; and that it is not contacting the steel housing or any other obstacle as it operates.
- 2) Inspect the cable for any signs of damage or fraying. Replace the spring/cable assembly, if either of these conditions exist.

- 3) Make sure that all the bolts and hardware are tight, secure and in good condition. This includes the roller clevis pins, which should be tight and not allowed to turn in their holes, only the rollers should turn.
- 4) Make sure that the housings are straight and aligned tightly against each other.
- 5) Make sure that the rollers are in good condition and spinning freely. If the rollers are not spinning freely, clean them inside and out by wiping them with a clean rag. If this does not correct the problem, check and see if there are metal burrs or slivers inside the housing that the rollers could be catching on and file them down smooth.

Never use chemical cleaners or alcohol to clean the rollers; this will damage them.

Do not lubricate the rollers; this will damage them. They are made of a self lubricating material.

Replace worn rollers.

# <u>Additional Required Inspection:</u>

After the initial two years of service and then every year thereafter, take the springs out of the housing and check for cracks or excessive wear and tear. Replace the spring/cable assembly, if either of these conditions exist.

Only use genuine Gorilla-Lift replacement parts; see your local dealer or call 1.877.388.8895 to order.

Gorilla-Lift is a division of BackSaver International, Inc., Somerset, Kentucky