

## PRO KARTLIFT INSTRUCTION SHEET

**DO NOT LET THE LENGTH OF THESE INSTRUCTIONS INTIMIDATE YOU. THE KARTLIFT IS VERY INTUITIVE. THESE LENGTHY INSTRUCTIONS ARE PROVIDED TO HELP YOU ENJOY THE FULL POTENTIAL OF YOUR PURCHASE. ADDITIONALLY, THESE INSTRUCTIONS DO NOT REPLACE COMMON SENSE WHEN USING YOUR KARTLIFT. PLEASE PAY ATTENTION TO SAFETY, AND CONTACT US IF YOU HAVE ANY QUESTIONS.**

Thank you for purchasing a KartLift one-person kart stand. If you come up with a creative way to use the KartLift, feel free to send us a photo we can put on our web site. Additionally, should you have any problem using the lift, give us a call. That's what we're here for.

KartLift is a trademark of TEK Enterprises, LLC. The KartLift designs are patented.

### Terminology:

1. KartLift: Used to describe the entire lift
2. Gas strut: Those black cylindrical things. There are four per lift. Two long horizontal gas lifts, and two shorter vertical ones. On some models one or both the vertical ones have blocking tubes.
3. Blocking tube: The cylinder around the bottom of the left vertical gas strut. It snaps back to prevent the lift from unintentionally collapsing.
4. Stub tubes: The lower portions of the rear uprights. The upper portion of the rear upright (the handle with the two bumper hooks) snaps into these.
5. Uprights: the four "legs" of the lift, the parts that are roughly vertical when the lift is fully upright.
6. Bumper hooks: The two hooks on the rear handle, used to grasp the kart's bumper.

## IF YOU READ NOTHING ELSE, READ THIS!

### **-Do not roll the KartLift with a disabled blocking tube.**

Reason: The blocking tubes prevent the lift from collapsing unintentionally with the kart on it.

### **-Do not insert the metal handle clips with the wire loops on the outside**

Reason: They will interfere with a gas struts when you fold the lift down, breaking the gas strut.

Instead, insert them with the loop on the inside.

### **-Do not over-tighten the bolts holding the gas struts**

Reason: The gas struts pivot on these bolts during the lifting, lowering, and folding operations. Snug them down, and then back them off a partial turn.

### **-Do not over inflate the tires**

Reason: Overinflation can damage the rims. We recommend about 30 psi.

### **-Do not lift the kart unless the bumper is squarely in both hooks**

Reason: Both hooks are needed to support the weight of the kart, as well as balance it. If the kart is not properly placed, there is a chance that the kart could fall off the lift (and unfortunately, right onto the horizontal gas lifts, bending them).

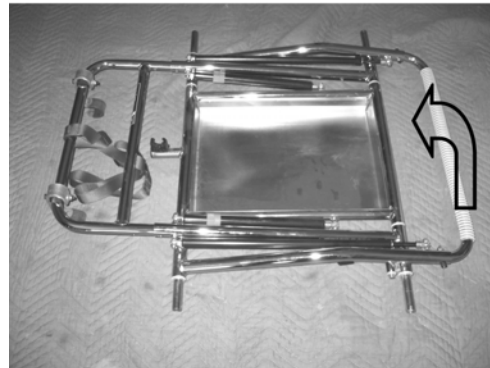
### **-Do not remove your kart's rear bumper bolts while the kart is on the KartLift**

Reason: Since the KartLift supports the rear of the kart via the kart's rear bumper, if the bumper comes loose, the rear of the kart will fall down onto the two horizontal gas struts.

## Assembly

### **A. Installing the rear handle (the one with the red strap)**

1. Place the lift on a flat surface (with the lift's tool tray hanging down, not bowing upwards).
2. Remove the two metal "C-clips" from the rear stub tubes, and slide the handle into those two tubes WITH THE BUMPER HOOKS FACING DOWNWARDS until the handle's cross bar comes in contact with the white plastic clip on the bottom of the lift..



Grasp the center of the front upright (the one with the protective hose on it) and lift it towards the other end of the lift. **WARNING: Once the padded bar is on the other side (left in the above picture, the gas struts will then take over and the lift will set itself up.**

- Slide the handle in to the highest position (one set of holes will be visible about an inch above the top of the stub tubes), and insert the spring clips with the loop on **THE INSIDE of the stub tubes** on both sides.



- Swing the bumper hooks out so that they are perpendicular to the handle, and tighten the mounting bolts. If it is not already, run the long end of the strap around under the handle and through the small loop, so that the Velcro piece is visible.

#### B. Install the Foot Lever



With the lift in the upright position, position the foot lever near the holes in the rear vertical stub tubes, as shown above. For ease of installation, you probably want to put the lift on its side or front side down for this step.

Remove the 2 long bolts from the foot lever. The washers are for use as spacers.

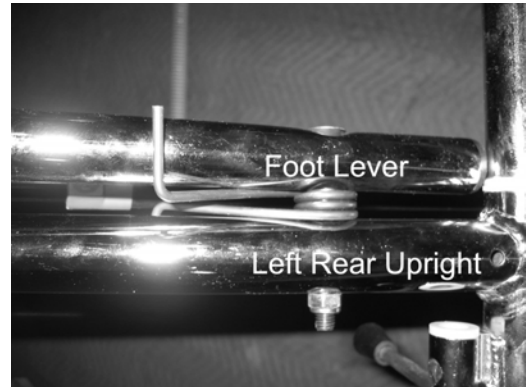
- On the **RIGHT** side, pass one **BOLT**, (USE **FIVE WASHERS BETWEEN THE FOOT LEVER AND THE UPRIGHT AND ONE WASHER ON THE OUTSIDE, NEAR THE NUT**), through the hole. You may want to finger tighten the nut.
- Starting from the inside working your way out, on the **LEFT SIDE** pass the second bolt through the foot lever, **FIVE SMALL WASHERS**, and **SPRING**. Finger-tighten the nut. Flip the left hand side of the spring past the left rear upright so it is in front of the upright, towards the front of the kart.



Before you tighten it down, the spring will be on an angle, as shown below.



However, after you tighten the nut down, it will straighten out and look like in this picture.



- Return to the right side and tighten the nut until it is snug. Leave it loose enough so the foot lever moves freely.
- Now, attach the cables to the two bolts at the rear of the foot lever. Sandwich the cable loop between the two large washers. The cable should move fairly freely when the foot lever is depressed.

### C. Installing the Wheels

1. Install the wheels using the supplied wheel nuts. It may be necessary to tap the axle to one side or the other in order to even the amount sticking out on each side. Use a wood block or dead blow hammer if pounding on axle, to prevent thread damage.

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## KartLift Features

### 1. Adjustable height

Remove the C-clips and raise and lower the rear, and two bolts to raise the front. Note—for best leverage, have the rear at the uppermost position and the front at the lowest position. Note that the C-clips must be inserted with the loop on the inside of the uprights, otherwise they will interfere with the folding operation.

### 2. Tool tray

The tool tray can be used to hold tools, parts, and grid equipment (such as starters and fire extinguishers)

### 3. Vertical lock (blocking tube)

Around the rear gas lifts there are tube(s) with orange or red tops. The purpose of these tubes is to prevent the strut from telescoping down (and thus the lift folding down) accidentally. These come pre-set. The flat portion should be facing the rear of the lift. For easier collapsing of the stand, you may temporarily disable the lock feature by rotating the red collars 180 degrees.

### 4. Foot lever

The purpose of the foot lever is twofold. First, it disengages the blocking tube in order to lower the lift. Secondly, while lifting the kart, you step onto the foot lever to use your static body weight to help lift the kart. The purpose of the spring on the one side is to retract the lever and keep it from dragging the ground when rolling the stand around the pits.

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## Using your KartLift

See the picture instructions for detailed procedures on how to lift and lower a kart, as well as fold the lift for storage.

### A. Prepping your kart

In most cases, you will not be required to make any modification to your kart to use it on the KartLift.

- Make sure your bumper is firmly attached to the kart. The bumper must not try to come off when you lift the kart by it.
- You may have to move your rear number panel one direction or the other in order to properly hook the KartLift onto your rear bumper.

- As the KartLift hooks onto and rotates around the kart's rear bumper, the kart's exhaust system should not be directly above the bumper.

### B. For the first time

If your kart outweighs you by more than about 25 lbs, the KartLift will still work, but will require that you use an efficient technique, which takes a little practice. If there is any way to easily lighten your kart (such as removing lead), this might be a good time to do it so you can practice with a lighter kart for the first few times.

- Raise back upright handle to max height (about 36 inches high), as this gives you the best leverage.
- You will need to determine where on your kart's rear bumper to best hook the lift. When the lift is properly positioned, you clear obstacles (like number panels) on your rear bumper, and the KartLift's front upright crosspiece (the part with the ribbed hose) is centered under the front part of your frame.

### C. Off-loading a trailer

Use this method to use the KartLift to remove your kart from a trailer with swing-out doors or from the back of a pickup or van. In the following two descriptions we use the term "trailer," but the technique is identical regardless of the transport vehicle.

1. Your kart should be facing the front of the trailer
2. Pull the kart partially out so that the rear wheels are hanging free
3. Push the KartLift on the ground up behind the rear of the trailer.
4. Partially collapse the lift and push it down to whatever height matches the kart's rear bumper
5. Hook the bumper, and pull back. You may need to roll the stand back a little bit to keep the stand's front upright from hitting the trailer as you lift. Since the front of the kart is already partially raised, you will find that this lift requires amazingly little effort.

### D. Loading a trailer

1. Push the KartLift holding the kart up to the rear of the trailer.
2. Release the blocking tubes and start to lower the KartLift. Let the KartLift start to roll backwards as the front uprights contact the rear of the trailer bed.
3. Once the kart's front wheels make contact with the trailer bed, push the kart and KartLift forward until the rest of the kart is horizontal and in the trailer.
4. Secure your kart in the trailer as you normally would.
5. If needed, you can get the kart into a high-bed truck (such as a 4-wheel drive pickup) by putting the stand in a wheelie to raise the kart's nose.

### E. Transporting a kart on the stand in a trailer

Since the KartLift has bumper hooks, it is possible

under the right conditions to transport your kart raised on the KartLift. This frees up a lot of floor space in your trailer. **HOWEVER, DUE TO THE UNPREDICTABLE NATURE OF THE DYNAMIC FORCES ENCOUNTERED IN A MOVING TRAILER, TEK ENTERPRISES LLC CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGE TO YOUR KART, TRAILER AND CONTENTS, OR KARTLIFT RESULTING FROM TRANSPORTING A KART UP ON THE LIFT INSIDE A TRAILER. IN OTHER WORDS, DO SO AT YOUR OWN RISK, AND ANY RESULTING DAMAGE TO THE LIFT OR YOUR EQUIPMENT IS NOT COVERED UNDER THE WARRANTY.**

1. Secure the kart to the KartLift in both the front and rear.
2. Make sure that the blocking tubes are in place locking the lift in the upright position.
3. We also suggest making an "X" with a strap, running from the front of your kart's nerf bars to the KartLift's rear axle. The purpose of this is to prevent this space from elongating, as it would if the lift were to start to fold down. This strap also reduces stresses on the vertical gas strut mount points.
4. Run another tie down strap from a D-ring in the floor of your trailer, from behind the KartLift's rear axle up over and in front of a rear upright, across to the other upright, and down to another D-ring. This strap prevents the lift from rolling or tipping forwards.
5. Finally, you should have a strap pulling the stand forward (and thus placing tension on the rear strap), to prevent the KartLift from rubbing against your trailer's rear door, which might damage the door's inner surface.
6. If you have frame rail concentric bumper bolts (a long bolt that screws into a rubber plug up inside the frame rail), you may want to secure your rear bumper to your bearing hangers, just to be sure that the motion in the trailer does not work the bumper loose.

#### **F. Steering**

You may have noticed that the front wheels do not caster like other stands. Even with a kart on the stand, you will find that the KartLift is surprisingly well balanced on its rear axle. To turn the kart and KartLift, just push down on the KartLift's rear handle, putting the stand into a slight wheelie, and point it in the direction you want to go. The lift will track straight.

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## **Maintenance**

Your KartLift is remarkably maintenance-free. Just follow these simple instructions for maintenance.

#### **A. Tire pressure**

Inflate the tires to 30 psi. Over-inflation can cause the rim to fail, and under-inflation may cause damage to the rim's bead area if you roll the stand over something protruding.

#### **B. Front bar pad**

We do carry spares. What causes this to wear fast is transporting the kart up on the lift without securing the front of the kart firmly to the front of the stand.

#### **C. Hook covers**

The black plastic coating on the KartLift's hook bumpers is the same rubber/plastic dip used on bicycle carriers, etc. If yours eventually wears out, heat shrinkable tubing makes a good substitute.

#### **D. Gas lifts**

The gas lifts should give you years of trouble free service. While depressurization is covered under the one year warranty, bending a lift is not (usually happens if a kart is dropped onto the horizontal lifts). Storing the KartLift in the unfolded or upright position during long periods of non-use will prolong the life of the lifts.

#### **E. Cleaning**

Use Simple Green or some other household type degreaser to keep the KartLift clean.

## **Troubleshooting**

#### **Kart Difficult to Lift**

The most difficult part is from the time that the KartLift's front upright contacts the underside of your kart's frame to the time when the rear KartLift uprights are vertical.

1. Make sure that the rear handle is raised all the way. It should be about 36 inches from the handle to the ground.
2. You may not have enough body weight to counterbalance the kart. Ideally, the kart should not outweigh you by more than 60 lbs. Having a second person step on the foot lever when the kart is partially raised in one possible solution here.
3. Put all your weight on the foot lever with one foot (have the other foot ready to catch you), lean **all** the way back using the full length of the strap with your arms fully extended.
4. Remove any heavy items that may have been temporarily placed in the kart, like tool bags, starters, or fuel jugs.

#### **KartLift Won't Fold Flat**

Usually the problem is incorrectly installed rear C-clips. Ensure that yours are installed with the wire loop on the inside.