



All-Terrain

Wheelchair Conversion Kits

Instruction Manual

**WheelEEZ® Rear Wheel Conversion Kit
(WZ1-WC-ATK-30/42/49"**

and

**WheelEEZ® Front Wheel Conversion Kit
(WZ1-WC-AT-FB-30)**



Chair Used for Reference ONLY

Congratulations! You have purchased the most versatile wheelchair conversion kits to convert your standard wheelchair into an all-terrain wheelchair. The All-Terrain Conversion Kits were specifically designed to modify **most** folding wheelchairs providing accessibility to beaches, parks, and trails— paths that standard wheelchair wheels cannot negotiate. Proper installation and care will provide you with exceptional performance as you venture into areas with sand and other challenging terrain.

Your conversion kits have been designed for safety and simplicity. In addition, they have been manufactured using corrosion-resistant stainless steel, aluminum, and high-strength molded plastic fittings. In addition, the kits are equipped with WheelEEZ® balloon wheels for long-lasting, low-maintenance service.

Please Read and Understand the Entire Manual Prior to Kit Installation.

All-Terrain Conversion Kits Illustrations:

Note: Prior to assembly, ensure that the following components arrived in your cartons.



**Reference Chair Only
(Not Included)**



Front Wheel Conversion Kit-assembled



Rear Conversion Kit-shown assembled

Wheel Conversion Kit Components



Parts:

- | | |
|------------------------------|-----------------------------|
| (2) WheelEEZ® Balloon Wheels | (8) 25.4mm (1-inch) U-bolts |
| (2) Axle Brackets | (1) PVC Plastic Spacer Tube |
| (8) 20mm (3/4-inch) U-bolts | (8) Flat Washers |
| (8) Nylock Nuts | (1) Aluminum Axle |
| (4) Quick Clip Pins (QCP) | |

Front Wheel Conversion Kit Components



Parts:

- | | |
|----------------------------------|----------------------------|
| (1) Balloon Wheel, WZ1-30UB | (4) Nylock Nuts, 6mm |
| (1) Caster Assembly | (4) Flat Washers, 6mm |
| (1) Rear Support Tube | (1) Hitch Pin |
| (1) Caster Support Tube | (1) Wire Lock Pin |
| (1) Center Support Tube Assembly | (2) Rear Axle Spacer Tubes |
| (2) U-Bolts, 20 x 6mm | |
| (2) U-Bolts, 25.4 x 6mm | |

General Description:

The Rear Wheel Conversion Kit fits **most** folding wheelchairs and utilizes standard hardware to connect the brackets to the chairs. Installation of the brackets may require only three U-bolts because for the wheelchair's frame structure – this is acceptable provided that the brackets tubes are located below the chair's rear frame tube. Plastic (PVC) material has been provided for use as clearance spacers for the wheels. Cut the material using a hacksaw or PVC cutters to the correct length to prevent wheel movement or contact with the chair's frame.

The Front Wheel Conversion Kit has been designed to work with the Rear Wheel Conversion Kit. This kit will fit **most** wheelchairs with caster stem bolts. Note that some applications will require disassembly of the existing stem bolts and casters to facilitate use of existing components. The intent is to use the wheelchair's existing caster stem bolts and hardware for the installation. Refer to your local hardware store if additional hardware is required.

In addition, this kit may be connected to the wheelchair frame using U-bolts when caster/stem-bolt mounting is not possible. Use the appropriate size U-bolts for your wheelchair's frame tube diameter, (20mm/3/4-inch or 25.4mm/ 1-inch). Plastic (PVC) material has been provided to maintain the center position of the center tube when mounted to the rear axle. Cut the material to the correct length and install as shown in the instructions. It is important to keep this tube centered for proper operation.

We have provided these instructions illustrating straight-forward connections that apply to **most** wheelchairs.

Installation of the kits require simple hand tools including a 5mm hex wrench, 10mm wrench or ratchet/socket, adjustable wrenches, hacksaw or similar, and pliers. **Note:** Disassembly of your particular wheelchair may require other tools.

It is important that hardware remain loosely fitted until all components have been assembled. After initial assembly, verify that the wheelchair's front-to-rear angle is acceptable for the user. Adjust components accordingly to ensure safety and comfort for the user. Thereafter, secure all hardware and re-check the chair's configuration.

Safety Precautions

WARNING

Failure to Adhere to the Following Safety Precautions Could Result in Serious Injury or Death!

1. Do not leave any person unattended or unsecured while in a modified wheelchair, or any wheelchair.
2. Always ensure the seatbelt is properly adjusted for the user.
3. Brakes are not an option once these kits are installed. Therefore, presence of an attendant is always a critical safety factor in order to be in control.
4. Weight Limitations: Observe maximum user weight for your wheelchair because the WheelEEZ® balloon wheels float - it is imperative to observe the user's weight in relation to the flotation of the wheels.
6. Environmental Precautions:
 - Maintain physical control of the wheelchair when in or near the water.
 - Use of two attendants is encouraged when water depth is greater than 15cm (6 inches).
 - Observe uneven terrain to prevent tipping (i.e., slopes, inclines, angles, etc.).
 - Observe tidal changes, wave action, wind speed and direction, and extreme temperatures.
 - Observe water depth and wave action when in the water. The balloon wheels will float - do not exceed water levels above the center of the wheels.
 - Sun and heat will cause metal parts to become extremely hot – use caution when handling.
7. Mechanical Precautions:
 - Ensure all lock pins, clips, fasteners, seatbelts, etc. are secure prior to operation.
 - Ensure WheelEEZ® balloon wheels are properly inflated, 0.14 - 0.28 bar (2 - 4 psi).

Assembly Instructions

Axle Brackets, Axle and Wheel Components

Note: Loosely assemble all components prior to tightening hardware.



Place chair upside down as shown. Loosely install (2) brackets as shown – each side of rear of chair with appropriate U Bolts supplied.



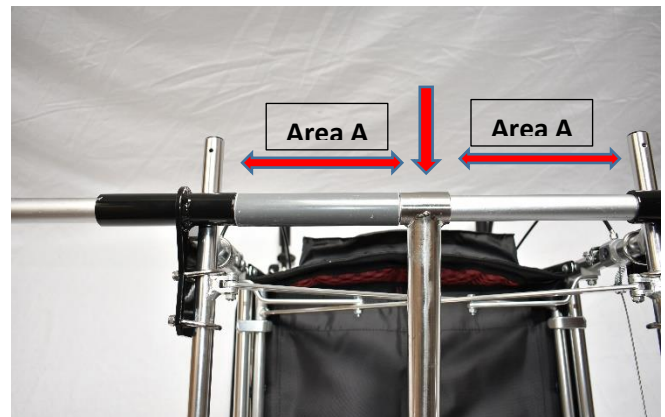
Correctly installed brackets



Insert axle through bracket and install tube



Insert axle through opposite bracket



Center tube (arrow) - measure to cut spacer

Note: Position tube at center and measure Area A, (2 places). Cut supplied spacer material to correct length. Remove axle and install spacers on each side of center tube.

The crossbar support and the crossbar support extensions may be installed in two positions to permit height adjustment. (After assembly, ensure the chair's front to rear angle is correct for safe transport of user. Adjust as necessary.)

The following photos illustrate installation using existing stem bolts connections. It may be necessary to install spacers to secure the extension tubes, since stem bolt length varies.

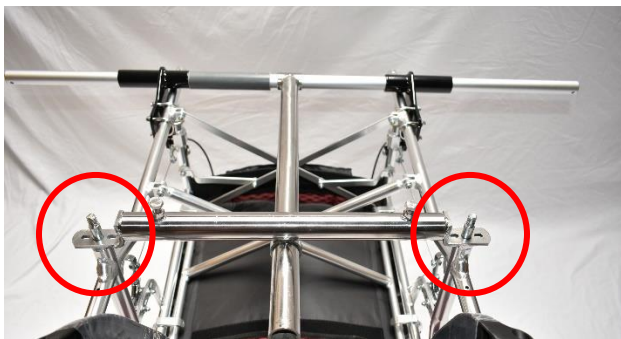


Install crossbar support tube – Config. 1

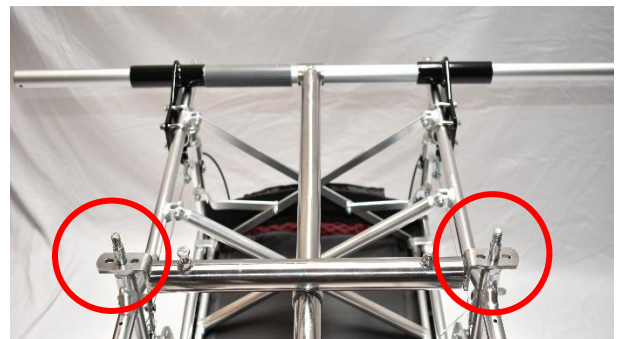
(Note position of extension tubes for height adjustment)



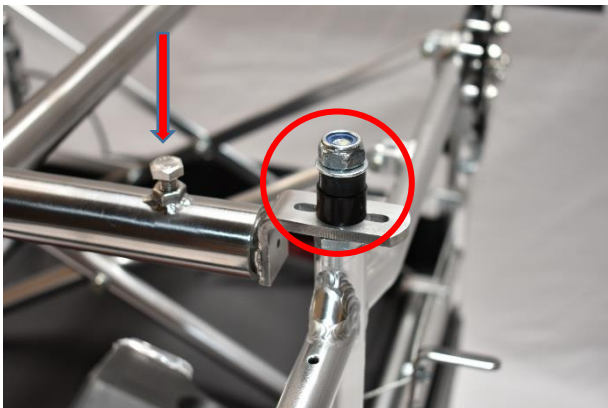
Install crossbar support tube – Config. 2



Extension tube Config. 1



Extension tube Config. 2



Secure extension tubes with spacers, washers and nuts, as applicable (circle) into caster stem bolt receptacles. After securing extension tubes, lightly tighten the crossbar bolts (arrow), two places – do not over-tighten!

The following photo illustrates installation using U-bolts to make the frame connections.



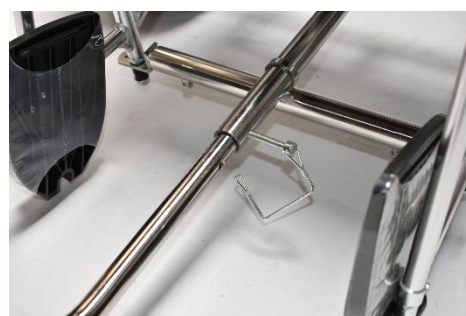
Install crossbar extension tubes using provided U-bolts, washers and nuts. Position tubes as close to the front of the chair's frame as possible. Note that the crossbar and crossbar extension tubes may be adjusted for height as in the previous section. Do not tighten hardware at this time. Check for correct height/angle to ensure safety.



Extension tube – Config. 1



Extension tube – Config. 2



Install and secure wire lock pin

Insert front extension tube into center support tube first to its shortest length. Note that this tube may be installed in two positions for height adjustment. After correct position and length have been established, adjust the length as desired and install Wire Lock Pin.

Rear Wheels to Axle



Install rear wheels – install Quick Clip Pins (QCP)



Push wheels out against QCPs



Check clearance and cut PVC to fill this area

Wheelchair widths vary, so cut PVC material to correct lengths and install between axle brackets and wheels to prevent sideways wheel movement.

Caster and Wheel Assembly

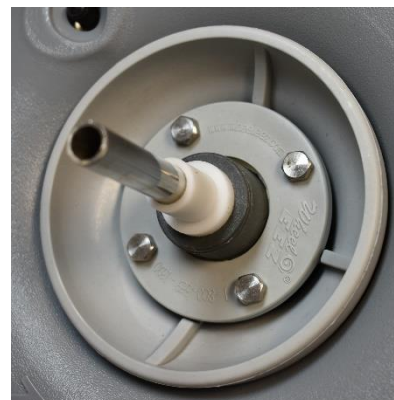
Assemble caster and wheel prior to installing onto the Front Wheel Front Conversion Kit.



Caster components



Insert bushing sleeves x2



Insert metal axle sleeve



Position wheel between
caster forks and install bolt



Install and tighten lock nut



Assembled Caster

Front Caster to bushing housing



Remove hitch pin from bushing housing –
push caster into housing



Reinstall hitch pin into bushing housing
– ensure pin passes through both holes.

Important - Final Assembly and Functional Checks

Place wheelchair in the upright position – observe the front-to-rear angle as viewed from the side. Adjust components to achieve the correct angle for the safety and comfort of user.

- * Secure all hardware – do not over-tighten.
- * Ensure the Wire Lock Pin is fully inserted in the front extension tubes and clipped securely.
- * Ensure that Quick Clip Pins secure rear wheels, and Hitch Pin secures the front caster.
- * Ensure that the WheelEEZ® balloon wheels are properly inflated – review information card supplied with the wheels or refer to the tire's sidewall.

Disassembly of your Conversion Kits are in reverse of assembly.

General Maintenance and Cleaning

We advise a clear-water rinse of all components after each use, especially after exposure to salt water, as well as prior to storage.

If sand or debris has entered between the wheels and axles, disassemble, rinse thoroughly and reassemble.

WheelEEZ® balloon wheels: We recommend a clear-water rinse after each use. In addition, we advise regular pressure checks to ensure proper inflation.

Limited Warranty

APSL - Hong Kong (Asian Prime Sources Limited), Effective April 07, 2010
Wheeleez, Inc. (Authorized Warranty Service Provider for APSL - Hong Kong in the USA)
3890 Industrial Way, Benicia, CA 94510 USA
Tel: 707-751-3999, Fax: 707-751-3939, www.wheeleez.com

LIMITED WARRANTY

CUSTOMER ACKNOWLEDGES THAT BY ACCEPTING AND USING THE Wheeleez® PRODUCT, CUSTOMER IS ACCEPTING ALL OF THE TERMS AND CONDITIONS OF THIS LIMITED WARRANTY AND ITS WAIVERS. CUSTOMER SHOULD IMMEDIATELY RETURN THE PRODUCT IF THESE TERMS ARE NOT ACCEPTABLE.

APSL - Hong Kong ("COMPANY") warrants to the original purchaser ("Customer") of its Wheeleez® products (i.e. the Wheeleez® tire, rim assembly, and frame) that such products shall be free of defects in material and workmanship for the lesser of (i) ninety (90) days from the date of purchase in cases where the Customer leases or rents the Wheeleez® product to third parties; or (ii) six (6) months from the date of purchase by the Customer in the case of other sales (the "Warranty Period"). With respect to any defect in materials or workmanship occurring within the Warranty Period, notice thereof from the Customer must be received in writing by COMPANY at its principal place of business not later than 30 days after expiration of the Warranty Period ("Covered Defect") or the LIMITED WARRANTY will expire and be void. This limited warranty shall not extend to or apply to any industrial use of COMPANY'S product which would require metal bearings for the Wheeleez® wheel, such as in construction applications. In such applications, Customer shall look solely to the separate warranty provided by the bearing manufacturer. Should any court extend the protections of this warranty to such Customer, then the limitations herein stated as to the remedies, duration and extent of the warranty shall apply.

Upon receiving timely written notice of a Covered Defect, and in full satisfaction of its obligations under this LIMITED WARRANTY, COMPANY shall have the option of repairing or replacing any part or the whole of its product to cure the Covered Defect and fully satisfy its obligations hereunder. At its option, COMPANY may either (i) repair or replace the Covered Defect at the Customer's facility, in which event Customer shall cooperate fully with COMPANY, or (ii) COMPANY may require that the Customer ship the part or product affected by the Covered Defect to COMPANY or its designated repair facility for repair. All notices by Customer respecting any Covered Defect shall be through the contact for Wheeleez, Inc., noted above.

All warranty replacements require prior COMPANY approval and must be shipped to COMPANY freight pre-paid. All warranty parts or products are returned to the Customer with shipping charges COD unless otherwise agreed to in writing. If a product or part is replaced or repaired, the Warranty Period for such product or part shall be the later of (i) sixty (60) days after the date of repair or replacement of such defective part or product, or (ii) the remaining length of the original six (6) month Warranty Period for such product or part. Any sales representations or demonstrations shown to the Customer were for purposes or illustration only and do not alter this Limited Warranty or imply any uses for the Company's product other than those for which it was designed. Customer agrees as a condition of its purchase of the COMPANY'S products to review the limitations listed in the wheel/tire warranty information.

This product is not designed and should not be (i) used for horizontal movement along an incline where one side of the product is elevated above the other, (ii) moved at speeds in excess of normal walking speed (2-4 miles per hour), (iii) subjected to sharp turning maneuvers. Exceeding tire pressure and/or maximum payload limitations voids any Warranty. This product is not intended to be used for long-term storage under loaded conditions. This product is NOT legal for "ON-ROAD" use and is NOT intended to be used as a FLOTATION DEVICE, FLYING INSTRUMENT, or TOY.

Any use of this product in a manner other than that for which it was designed shall terminate any warranties hereunder. Furthermore, Seller will have no warranty obligations under this LIMITED WARRANTY if the products or goods furnished by COMPANY to Customer are subjected to abuse, misuse, negligence, OVERINFLATION, accident or any modification not approved by Seller (any modification approved by COMPANY must be carried out in accordance with COMPANY's instructions, be approved in writing by COMPANY, and must be completed consistent with good engineering practices).

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Should Customer wish to enhance the warranties provided by COMPANY, it may do so by contacting COMPANY and negotiating for enhancements to the limited warranty herein granted based on price. However, no such enhancements shall be valid unless evidenced by a specific agreement to such effect, duly executed by an officer of, and after full payment for the additional costs of such an enhanced warranty.