

# **EZ-CLASSIC    QUADRIBENT™**

**By Blackbird Designs Inc.    [BlackbirdBikes.net](http://BlackbirdBikes.net)**



**Mark 5    2017**

## **Customer Instructions And User Guide**

The **Quadribent™** is a 2-seat, side-by-side, human powered vehicle that enables almost anyone to enjoy cycling. The 4-wheel design maximizes stability. The recumbent seating position maximizes comfort. Heads-up design reduces neck, shoulder, and hand discomfort. Co-Captain steering allows either rider to pilot the vehicle. The dual-drive allows people with different physical abilities to ride together with either rider generating from 0 to 100 percent of the pedal power. The **Quadribent** makes it possible for people of different ages, sizes, and abilities to ride together.

## General Rules for Safe Riding

1. Adults should supervise children at all times.
2. Always wear a CPSC approved helmet and some form of eye protection.
3. Always ride with a rear view mirror attached to your helmet or mounted to your vehicle.
4. Obey all traffic rules and regulations, signs and signals.
5. Ride on the side of the road, going in the same direction as the traffic.
6. Use proper hand signals when turning or stopping.
7. Be alert at all times, especially watch for cars pulling out into traffic and for opening doors.
8. See EZ-CLASSIC Owner's Manual for more information: **EZ- CLASSIC Riding Tips, Night Riding Tips, Wet Weather Riding Cautions, and Fitting Your EZ- CLASSIC.**

## Rules for Riding Your EZ-CLASSIC Quadribent™

1. **DO NOT ALLOW ANYONE TO STAND OR SIT ON THE CARGO PLATFORM OR ANY QUADRIBENT CONNECTING PARTS, OR TO RIDE ANYWHERE EXCEPT TO SIT ON THE SEAT.**
2. Inspect your EZ-CLASSIC **Quadribent** before every ride. Make sure all nuts and bolts on the EZ- CLASSIC and accessory **Quadribent** frame are securely tightened. Check your brakes by applying them and pushing the **Quadribent** forward and backward to make sure they are engaging properly. Check tires for proper air pressure as indicated on the sidewall of the tires. Make sure the quick release levers on the wheels and seat are properly closed and secure. Make sure all of the **Quadribent** mounting hardware is properly installed. Check to see that the quick release pins on the steering tie rod are properly inserted and locked. Stop vehicle and discontinue riding if any mechanical problems arise, including but not limited to any sudden changes in: vehicle stability, steering control, or pedaling difficulty.
3. Check and adjust your seat position/seat recline before mounting your **Quadribent**. Never attempt to readjust the seat position while vehicle is in motion.
4. Always ride your **Quadribent** with a partner. Never ride the **Quadribent** "solo" for the vehicle may lose stability in turns and can tip over resulting in serious injury.
5. Co-Captain Steering links the handlebars of both EZ- CLASSIC recumbents together allowing either rider to pilot the **Quadribent**. Each rider should always keep both hands on the handlebars when the vehicle is in motion. Each rider is responsible for steering around obstructions to avoid collisions with people or objects.
6. Remove the factory supplied "Parking Brake" red Velcro strap after mounting the vehicle. Always reinstall the "Parking Brake" strap before exiting the vehicle.
7. As a courtesy to your riding partner and for the safe operation of the **Quadribent**, both riders should communicate all non-emergency turns, braking, starts and stops before they are executed.
8. For the safety of both riders, it is recommended the vehicle be slowed to less than 10 miles per hour (mph) before initiating any turns of 90 or more degrees.
9. The EZ- CLASSIC **Quadribent** is designed for use on streets and bike paths only. Off-road, off-trail, mountain trail or open field riding is not recommended and should not be attempted.
10. The **Quadribent** can be separated into two recumbent bikes for "solo" riding, but unbolting/rebolting it on a regular basis is not recommended. An optional Quick Release Kit can be ordered at initial sale or added later to allow easy separation for riding, transporting or storage. The Quick Release pins replace several bolts and can be installed and removed without tools.

## Helpful Tips

- The **EZ-CLASSIC Quadribent™** Mark 5 is made for EZ- CLASSIC models.
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- The EZ-CLASSIC **Quadribent** is intended to be sold in a fully assembled and adjusted condition factory direct. If bought from a bike shop they are responsible for final assembly and adjustment.
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- The **Quadribent** is manufactured to be assembled and maintained with basic hand tools: metric wrenches, metric socket set, metric Allen wrenches, and a tape measure.
- Do not modify, drill holes or mount accessories to **Quadribent** cross beams or frame.
- For questions about the Quadribent structural assembly, contact Blackbird Designs Inc.
- When replacing worn O.E.M. tires supplied with the EZ- CLASSIC, Blackbird Designs recommends high pressure Maxxis Hookworm (110 psi max 16” front and 110 psi max 20” rear) tires. This is a very tough tire with low rolling resistance. Check with your local bike shop for availability.

**DO NOT ALLOW ANYONE TO STAND OR SIT ON ANY OF THE QUADRIBENT CONNECTING PARTS. SIT ONLY ON EITHER OF THE 2 BIKE SEATS OR UP TO 150 POUND PERSON ON AN OPTIONAL JUMP SEAT ATTACHED TO THE REAR CARGO FRAME/TAILSTAND.**

### FOR TECHNICAL SUPPORT:

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- 1) **Red Velcro “Parking Brake” (included)** - Install on either of the ‘drivers’ brake levers (Figure 1). Apply brake, wrap it around, fuzzy side out, through the loop and attach it to itself. The parking brake is intended to keep the Quadribent from rolling on relatively flat ground, when not in use. **Never park facing uphill or downhill.**



Figure 1

**FRONT END WHEEL ALIGNMENT**

2) Check front-end wheel alignment by measuring the distance between the front rims of the two bikes (Figures 2, 3 & 4). (Tape measure included) Two measurements are required: **axle height** on the **leading edge** of the front rims; **axle height** on the **trailing edge** of the front rims. These measurements should be approximately 1/8” –1/4” smaller leading edge measurement than the trailing edge. This is commonly called “toe-in.”

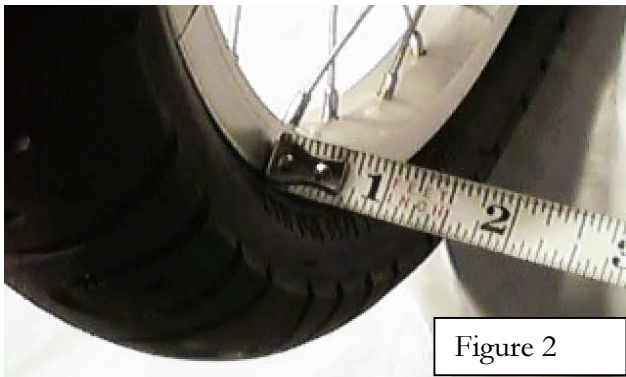


Figure 2



Figure 3



Figure 4

- 5) If the two measurements show the front wheels are out of alignment, loosen the two Allen screws of the steering lever with the ‘Z’ wrench (included) and rotate it as needed. Then remeasure.



After adjusting the steering levers, retighten the screws and visually check that they are about the same angle outboard, with the two front wheels straight.

**Wheel alignment should be checked regularly, before & after a long ride, and after riding on rough roads.**

# QUICK RELEASE PINS FOR QUADRIBENT



Removable steering tie rod, removable front beam.



Large pin through lower beam.  
Install lower beam first to connect and  
remove last to disconnect.

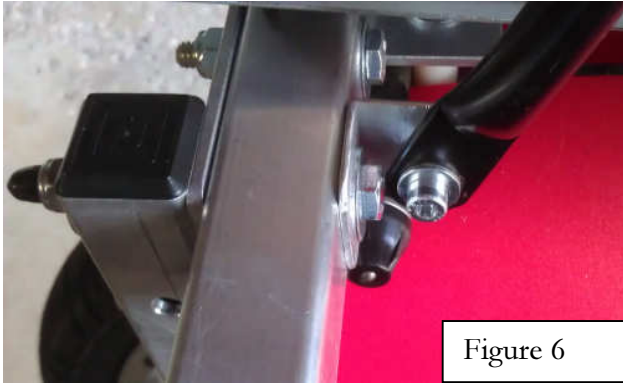


Pins through top rear beam.



Pin through cargo platform.

6) **TALL RIDER bracket.** If the inboard seatback stay is blocked by the Quad frame when the seat is pushed all the way back, and you need more seat adjustment, then add the bracket to the Quad frame. The stay will need to be bolted M6-18MM to the bracket (Figure 6).



7) An **OPTIONAL Seat Belt** can be installed on the seat back, low across the lap. A second seat belt can be installed higher across chest or the two belts may be crisscrossed at the chest. (Figure7).



## SPECIAL NEEDS CUSTOMIZATION

Toe clips can be added to the pedals to secure feet to the pedals. An extra Velcro strap can be added to go around the heel to keep the foot from slipping to the back. Contact Blackbird Designs for the latest in accessories for people with “special-needs.”

