

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11



Twin Tri-Rider Tandem

PREPARATION

Correct assembly is critical to avoid damaging components. Please review these instructions BEFORE starting the assembly and refer to them during the assembly process.

1. Carefully remove all the components and packaged hardware from the shipping boxes.
2. Check the contents of the two boxes and confirm that you have received a complete package. The contents should include:
 - (a) Main box:
 - (1) A main frame assembly with cranks, chain, chainguards and Shimano derailleur pre-installed
 - (2) Two handlebars and quill stems with brake levers, Shimano 6-speed shifter and handlebar grips pre-installed
 - (3) Two seat and seat post assemblies
 - (4) One stem to mount stoker handlebar on captain's seat post
 - (5) Two 24-inch rear wheels, one 24-inch front wheel
 - (b) Secondary box:
 - (1) Rear frame assembly and rear axle assembly with drum brake and final drive cog pre-installed
 - (2) Two rear fenders and one front fender / with fender stay installed

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

- (3) Two fender stays for rear fenders
- (4) Plastic bag containing mounting hardware
- (5) Two sets of pedals
- (6) Two rear reflectors

ASSEMBLY

Correct assembly is critical to avoid damaging components. Please review these instructions BEFORE starting the assembly and refer to them during the assembly process.

1. Open the plastic bag containing mounting hardware. Group all similar nuts and bolts in preparation for assembly.
2. Separate and group all similar hardware to confirm that you have everything necessary for correct assembly.
 - a. Refer to photograph 1.
 - b. You must have all the hardware items identified in the table below:

ITEM	QUANTITY	FUNCTION
Brake Spring	1	Install over rear brake cable between cable adjustor and brake assembly for cable return
12mm cap screws M5x0.8	6	Used to mount rear fenders to fender stays Note: Centre stay is the shorter one
M5x0.8 nuts	6	
12mm Hex screws M5x0.8	12	Used to mount fender stays to rear frame Note: Centre stay is the shorter one A ratchet wrench is recommended
30mm Carriage bolts M10x1.5	4	Used to mount rear frame to front frame Note: Nuts and washers face inside frame
Large washers	4	
M10x1.5 lock nuts	4	

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

Cable end crimp	1	Used to cap rear brake cable after installation
Rear reflectors	2	Install on rear fenders using hardware already installed on rear of reflector
Chain and chain-link	1	Install and tension the secondary drive chain before completely tightening the carriage bolts used to connect the front and rear frame sections.
Brake housing extension	1	Slide over the rear inner brake cable to extend the existing housing
16mm Allan bolts M6x1.0	4	Used to mount basket to rear frame Note: The support brackets are to be installed parallel to the frame
Small washers	4	



Photo 1: hardware package contents

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

Important:

- To insure an optimal chain line for the secondary drive chain, loosen the grub screw anchoring the gear on the rear axle to permit it to float sideways. Install and tension the secondary drive chain and then re-tighten the grub screw.
 - Separate the rear fender stays by size. Two are slightly smaller than the other four. Those two shorter stays **MUST** be installed in the center of each rear fender.
 - The hex head bolts address a clearance issue on the drive side when installing the fender stays to the rear frame. Grease the bolt threads, start by hand and then use a ratchet wrench to tighten the bottom bolts first. The top bolts will need to be finished without a ratchet wrench. The non-drive side can be installed with a Phillips head screwdriver as there are no clearance issues.
3. Prop the front frame assembly vertically and align the rear frame section perpendicular to it. Slide the rear assembly forward inside the rear frame dropouts on the front frame assembly and make sure that the two bolts already in place align with the slots on the rear frame section. Add the second set of anchoring bolts to the dropouts (Head inside / locknut outside).
 4. Tighten all four bolts that hold the two frame sections together making sure that the rear is perpendicular to the front.
 5. Unwrap and separate the wheels and fenders. Use caution when unpacking.
 6. Install the drive side rear wheel (right hand side RHS). This axle nut should be fully tightened (40Nm). The right wheel and left-hand wheel are interchangeable.
 7. Install the non-drive side wheel (left hand side LHS). **DO NOT OVERTIGHTEN!!** Be sure that the left axle nut is loose enough that the inside spacer is just barely free to spin by hand. Overtightening will side-load the bearings and cause premature wear and bearing failure. A clicking noise from the left wheel bearing while driving is a symptom of overtightening.
 8. Install the front wheel assembly making sure that the tabs on the safety washers fit into the holes on the fork and that the rim is centered in the fork arch before tightening the axle nuts.
 9. Install the front fender on the fork using the long bolt and nut assembly supplied in the hardware package and the pre-installed fender stay mounting screws.

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

10. Install the gooseneck and handlebar assembly using the headset cover found in the small parts box (g) to hide the headset. Brake levers, shifter and grips are pre-installed on the handlebar.
11. Complete the rear drum brake cable installation by passing the cable through the rear cable adjustment assembly. Add the brake return spring over the cable and finally feed the cabled through the hole in the anchoring bolt and secure the nut. Adjust cable tension so that parking brake is fully engaged when brake lever is parallel to the handlebar.
12. Complete the front brake adjustment. Proper adjustment will just permit the removal of the cable by unlatching the brake noodle. Brake pads are properly aligned when square to the rim and have 1mm vertical clearance to the tire on each side.
13. Complete the shifter cable installation by passing it through the rear derailleur adjustment assembly and finally under the derailleur cable anchoring nut. First put the shifter in 6th gear and the rear derailleur on the smallest cog. This will remove all preload from the cable.
14. Thread the chain through the derailleur and over the chainring and join using a bicycle chain breaker/riveting tool or a Quick Link (not provided). Note: Any good quality 6/7/8 speed chain is a suitable replacement.
15. Mount the rear fenders using the hardware supplied.
16. Lightly grease inside the seat tubes and install the seat and seat post assemblies. The seat position can be adjusted slightly by sliding the seat backwards or forwards on the seat rails.
 - A smaller rider can be better accommodated by reversing the gooseneck than by advancing the seat to an extreme forward position. A larger rider can be better accommodated by installing a gooseneck with a longer stem than by installing the seat in its extreme backwards position.
17. Install the pedals (L on the left side with a counter clockwise thread, R on the right with a regular clockwise thread).
18. Install the chain guard using the pre-installed mounting screws. Alignment can be a bit finicky. On occasion the mounting screws are too long and must be replaced with shorter versions to avoid touching the chain.
19. Install the white reflector on the front steering stem. Install wheel reflectors on all three wheels (red on the rear wheels, orange or white on the front wheel).
20. Install cable crimps after adjusting and trimming cables.

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

21. Inflate the tires. The recommended tire pressure is marked on the tire sidewall. Adjust the handlebar angle and the seat height.

Note: For your own safety it is recommended that you bring the assembled tricycle to a competent bicycle mechanic for an inspection before using it.

TRICYCLE FIT AND ADJUSTMENT

SADDLE HEIGHT / ADJUSTMENT

Never ride your tricycle with the seat post raised beyond the “Maximum Height Mark” stamped on the seat post. Ignoring this can result in the bending or breaking of the seat post and possible serious injury.

When the pedal is in its lowest position, adjust the seat height so that the knee is slightly bent when the ball of the foot is over the pedal axle.

STEERING STEM HEIGHT

Never ride your tricycle with the handlebar stem raised beyond the “Maximum Height Mark” stamped on the stem. Ignoring this can result in the bending or breaking of the stem and possible serious injury.

Adjust the height to where the handlebars feel most comfortable. When changing handlebar height the hand brakes may have to be readjusted.

CARE AND MAINTENANCE

REGULAR INSPECTION

1. Hand Brake: Make sure the brake engages, by squeezing the hand brake.
2. Wheels: Check wheels for alignment.
3. Pedals: Inspect pedal bearings and tightness on crank.
4. Handgrips: Replace worn or loose grips.
5. Chain: Check for proper tension. Replace if damaged.
6. Seat: Adjust for comfort and safety.
7. Tires: Keep inflated to recommended tire pressure (indicated on tire sidewall).

BELIZE BICYCLE

Tri-Rider Tandem Assembly Guide

Revision 2019-06-11

8. Reflectors: Replace broken or missing reflectors.
9. Chain guard: Replace if damaged or missing.

REGULAR MAINTENANCE: Bi-Monthly

1. Keep all painted components clean and waxed.
2. Spray all chrome parts with protective spray (LPS-1, WD-40, etc.)
3. Lubricate the axle shafts, the inside bearings of both pedals and the chain.
4. When storing over a prolonged period, keep tires off the floor to prevent flat spots and cover if stored outdoors.

PREVENTIVE MAINTENANCE: Every Six Months

These are procedures that should be performed by a local bicycle shop.

1. Check tires for wear, rim cuts and valve core condition.
2. Check wheels for cracks and alignment.
3. Check brakes for proper operation.
4. Clean and repack all bearings and adjust all cones.
5. Check for worn bearings, cups and cones.
6. Check chain for wear or adjustment and clean and adjust or replace as needed.
7. Check for loose nuts and bolts.
8. Check for smooth shifting.