# Worksman PortoTrike: The Compact Deluxe Adult Folding Tricycle

### Assembly Instructions, Parts List, and Owner's Manual for PT, PT2F, PTCB, PT2CB, PT3CB

Congratulations on your purchase of the Worksman PortoTrike Compact Folding Tricycle, one of the most popular adult recreational tricycles of all time. This is a recreational tricycle for the consumer market, with a recommended weight limit of 210-225 pounds, depending on brakes chosen. The low step-through and compact frame design are ideal for those riders who simply want to ride leisurely, safely, and comfortably. The PortoTrike has been carefully manufactured in the USA using domestic and imported parts, with simple finishing assembly required. It is always recommended to have a gualified bicycle mechanic perform repairs and assembly of any cycle. Please read these instructions thoroughly prior to assembling and riding.



- 1 -

#### Failure to have this cycle professionally assembled could result in injury or death.

Tools Needed for Assembly: Phillips and Flathead Screwdrivers, Large Adjustable Wrench

#### (A) Unfolding the PortoTrike:

- Remove protective bubble wrap and cardboard.
- Located at the PortoTrikec hinge, find the quick-release arm, loosen it, and swing towards the rear.
- Now that hinge is free, unfold the trike so that the frame is straight.
- Slide guick-release arm s pin down through frame hole, pull lever forward, and tighten.

#### (B) Steps to Attach Front Wheel/Front Fork to Main Frame:

- a. Slide one bearing (49B) onto the fork steerer tube cone, balls facing up.
- b. Slide fork assembly into the front of the frame; make sure that bearing is flat.
- c. Place the remaining bearing (49B), balls facing downward, onto the steerer tube.
- d. Thread top adjustment cone (52B) onto this tube. Tighten the bottom. Again, make sure both bearings are sitting evenly inside their respective cones. Hand-tighten until tube is tight enough the sit steady but can still turn freely.
- e. Place keyed silver washer (53) above the adjustment cone. (Kev inside slot in tube.)
- f. Next, place quick release clamp (4911Bit has a black handle) above washer, with clamp arm towards the back of the cycle.
- g. Next, place reflector bracket (5030F) on top of the clamp with key inside slot as done before. Make sure holes point upwards.

(f)





- h. Place 2 regular washers (53B) above the reflector bracket, followed by the small black-keyed washer (53BWO), and then screw on the threaded lock nut securely (54B).
  - Note: Headset assembly should be tight enough so all pieces are touching and there are no loose pieces.





(a)







(g)

#### (C) Handlebar Set Up:

- Open quick-release clamp (4911B) on headset assembly.
- Insert handlebar stem (55E) into the front tube, with the head of the stem facing forward. NOTE: Must be at least 4" into the tube, or damage to fork may occur.
- With stem at preferred height, tighten clamp and tighten screw securely.
- Insert the handlebars (55F) into the stem opening, and place at desired angle; then simply tighten the bolt until handlebars remain in that position. Check the handlebar stiffness before riding.
- Install brake levers:
  - Remove brake levers from inside front wheel, and remove packaging.
  - Remove small bolts from each of the brake levers, and open clamps.
  - Place brake levers as seen in picture, replace the bolts, and tighten.
  - For 3 Speed Models, follow the same instructions in order to attach your gear shifter.
  - Next slide handlebar grips (55B) onto handlebars.
  - This can be done easily after soaking the handlebar grips in warm water for 30 seconds.

#### (D) Pedal Installation:

- Pedals are marked *L* for left, and *R* for right, on the threaded end of the pedal axle.
- Using a wrench, screw in the *R* (right) pedal onto the right side of the trike (the chain side), and similarly, screw the *L* (left) pedal onto the opposite side.
- IMPORTANT: LEFT PEDAL TIGHTENS COUNTERCLOCKWISE!
- Attempting to insert pedals on wrong sides will damage the threads on the pedals. DAMAGE BY FAILURE TO FOLLOW INSTRUCTIONS WILL NOT BE COVERED BY WARRANTY.



L and R are written on these surfaces



### (E) Rear Cargo Basket Installation:

• Place basket on the rear of the frame, centering the basket between the rear two wheels.

Place washers onto the basketos bolts.

• Place both bolts through the outer hole in the basket, through the holes in the frame, and then install the two elastic stop nuts under the frame into the bolts. (You will need two wrenches to tighten these bolts fully. It will get more difficult to turn the wrench as the bolt starts to grab the elastic in the nut.)

# (F) Seat Installation:

- Place seat post into clamp located on bottom of seat. Place at desired angle and tighten securely.
  - Make sure that the seat post is all the way through the clamp.
- Place other end of seat post through the quick-release clamp (black handle) at desired height and close clamp. Tighten bolt on clamp to ensure that the seat will not move when user sits on the trike.
  - When placing seat at desired height, make sure that the seat post is at least 3.5 inches inside the seat post tube.



- There are a total of 5 reflectors:
  - 3 curved rectangular white reflectors for each wheel.
  - 1 square white reflector for front.
  - 1 square red reflector for rear.
  - Rear Reflector:
    - Screw through the mount located on the rear cargo basket using the small screw given.



- Front Reflector:
  - Screwed on the same way as the Rear reflector, but it attaches to the front reflector bracket that was previously installed with the headset assembly. Make sure that the two locator-knobs fit into the holes in the bracket.
- Wheel Reflectors:
  - These reflectors install on the inside of the two layers of spokes. The reflector has a groove that will be facing you that will be placed onto a spoke. When this is done, place the bolt given to you through the whole, and tighten the nut on the opposite side- this should sandwich the spoke between the bolt and the reflector, and secure the reflector in position.

#### WHEEL REFLECTORS



BÁCK





Make certain to read the manual prior to riding. Make certain to understand the rules of the road and safety instructions. Do not ride cycles after dark. In dusk or dawn, lights are recommended. Use of a helmet is always a good precaution, and may be required by law. Inspect your cycle regularly for wear of parts and replace as required. Only use factory original replacement parts. Lubricate chain, caliper brake pivot bolt and other parts as necessary and at least once every 6 months.

#### How to Fold Your Worksman Folding Port-o-Trike Tricycle

To fold, pull the Safety-Loc+lever to the loose position. Pivot the lever toward the side of the tricycle. Lift up on the arm, releasing the pin from the Safety-Loc+hinge pinhole. You will then be able to fold the frame. Be careful to position the pedals for wheel clearance. (The front wheel should tuck in toward the rear of the frame to the inside of the left wheel.) To refold, see Section A of these instructions. It is advisable to place grease in the pinhole on the frame hinge every so often so the "Safety-Loc" system works easily.



#### **Owner's Responsibility:**

- 1) Make certain that all assembly instructions have been followed and that the tricycle is safe and ready to ride.
- 2) Perform maintenance as needed, and provide instructions to anyone who may ride the cycle.
- 3) Conform to all local regulations, including traffic laws, and be deemed physically fit to ride a cycle.

Where and How to Ride a Three Wheeler: It is recommended that you ride in areas that are paved and relatively flat. Avoid steep hills and naturally ride where you feel safe. Low traffic areas are most desirable. Sit up straight when going straight. When turning, you should lean ever so slightly into the direction of the turn. Slow down prior to making a turn. Never make sharp turns. Steer by pointing the front wheel in the direction you wish to go. Note - Tricycles have a tendency to pull slightly to the left. This is common in all three wheelers.

It is common to hear some clicking noise that emanates from the chain when the tricycle is new. This will stop when the chain is broken in. (Chains stretch slightly when new.)

**Brakes and 3 Speed Coaster Brake Information:** Port-o-Trikes are equipped with a front caliper, drum brake, or both. Operate the hand brake by squeezing the hand lever on the handlebar. Coaster brakes (foot brakes) are engaged by pedaling backwards until the brake operates. It is best to gently slow the cycle down using the hand brakes and completing the stop using the coaster brake. For those models with the 3 speed coaster brake, simply use the handlebar mounted shifter to select the desired gear. Gear 1 is the easiest gear for easier starting or going up hills, while gear 2 and 3 are useful once you get to your desired riding speed. Select the gear that suits your individual taste and comfort level. *DO NOT SHIFT AND PEDAL AT THE SAME TIME. PAUSE PEDALLING, SHIFT, AND RESUME PEDALLING.* 

**Axle Bearings:** Be sure to lubricate rear axle and wheel bearings every six months. Use a bearing lubricant, which is available at any hardware or auto parts store. Failure to lubricate axle bearings can cause the bearing to seize and cut through the axle. If you hear a grinding or hissing sound, lubricate bearings immediately or replace if damaged!

#### Replacement Parts List: (PT, PT2F, PTCB, PT3CB)

*Please note that there are two styles of PT rear axles and drive wheels.* Style õAö uses a round drive plate welded to the axle with three prongs that protrude into three holes in the hub of the drive wheel. Style õBö uses a keyway, which is a rectangular piece of steel that slips between a groove in the axle and a slot in the drive wheel hub. See illustrations below to determine which style you have before ordering any replacement parts.

#### Front End Assembly

- 153 Front Fork (specify color) 50B-V Head Parts Set 4911B Quick Release Clamp (fork) 48B Ball Cup (Upper) for frame head tube 48C Ball Cup (Lower) for frame head tube 49B Bearings for Headset (pair) 51B Fork Bottom Cone (presses onto fork) 52B Threaded Top Adjusting Fork Cone Key Washer (Thin - Lower) 53 Key Washer (Thick - Upper) 53B 53BWO Key Washer (Thin - w/o tab) 54B Top Fork Lock Nut Hand Grips (pair) 55B 55E Handlebar Stem
- 55F Handlebar
- 5030F Reflector Bracket

#### Frame Parts

3200CB	Frame (Specify color)
4908K-S	Safety-Loc hinge bolt / lever parts kit

#### Seat and Related Parts

4908D Seat post (1+x 15+w/ 7/8+top) 6911V Saddle Wide (with springs - optional)

#### Front Wheel and Related Parts

- M20F Front Wheel w/o Drum w/o Tire M20F-AL Front Wheel w/o Drum w/ Alloy Rim 467A Front Drum Brake Wheel w/o Tire 467 Front Drum Brake Wheel w/Tire 467A-AR Front Drum Wheel w/ Alloy Rim
- G250 Front Drum Brake (Hub only!)
- G219 Brake Cable and Casing: Drum Brake
- G220 Brake Cable and Casing: Caliper Brake

#### Rear Free (Left Side) Wheels

468A Rear Wheel w/ 2 bearings w/o tire
468 Rear Wheel w/ 2 bearings w/ tire
468A-AR Rear Wheel w/ 2 bearings w/ Alloy Rim

#### Tires, Tubes, Wheel Parts

- 6012W Tire 20x1.75 White Wall
- 6012R Tire 20x1.75 Red Line
- 6012A Tube 20x1.75
- 1017A Rim Strip
- 1014H Spoke for front drum wheel (Sold Qty 36)
- 1014I Spokes for rear wheels (Sold Qty 36)
- M20 Rim Only (not a built wheel)

F820L Non-Locking Brake Lever . Left (Std) F820R Non-Locking Brake Lever . Right (Std) F852L Locking Brake Lever . Left (Optional)

F852R Locking Brake Lever . Right (Optional)

# WHEN ORDERING WHEELS WITH TIRES, BE SURE TO SPECIFY WHICH TIRES YOU NEED.

#### Crank Assembly and Parts

- 7217 Pedals (pair)
- 1265 Crank Parts Set (All parts inside crank housing)
- 3275 Crank (5.5+)
- 1380C Front Sprocket 36T
- 1267G Complete Crank set (1265, 3275, 1380C)

#### Fenders (Plastic is standard as of 2012)

Front Fender (Chrome)
Rear Fender (Chrome)
Rear Fender Kit Complete (Chrome)
Front Fender w/ Hardware (Chrome)
Front Fender w/ Hardware (Plastic)
Rear Fender (Plastic)
Rear Fender Kit Complete (Plastic)
U-Brace: Front Fender
L-Bracket: Front Fender
Brace w/ Clamp: Rear Fender (Each)

- 4911A Quick Release Clamp for Seat Post
- 7910V Saddle- Wide (w/o springs standard)

#### **Rear Axle and Related Parts**

Note Style A & Style B replacement parts! (See diagrams.)

- PARTS FOR EITHER STYLE A OR STYLE B
- 57 Rear Axle Elastic Lock Nut
- 4129A Rear Freewheel Sprocket (PT, PT2F)
- 62B Set screw for 62 or 69B
- 62C Keyway for 62 or 69B
- 174W Rear Axle spacer washer

**STYLE A** AXLE PARTS (5/8+axle w/ 3-prong drive plate)

- 174HD Bearing for rear axle/wheels (cartridge style 5/8+)
- 176 Rear Axle w/ drive plate (round disk w/ 3 prongs)
- 62 Bushing (5/8+for 4129A)
- 69B Fixed Drive Sprocket (5/8+PTCB, PT3CB)
- STYLE B AXLE PARTS (3/4+axle center w/ keyed drive slot)
- 173 Bearing for rear axle (cartridge style 3/4+)
- 174HD Bearing for rear wheels (cartridge style 5/8+)
- 176K Rear Axle w/ keyway slot
- 61 Bushing (3/4+for 4129A)
- 69A Fixed Drive Sprocket (3/4+PTCB, PT3CB)

#### Rear Drive (Right-Side) Wheels

- 468DA Rear Drive Wheel w/o tire (Style A)
- 468D Rear Drive Wheel w/ tire (Style A)
- 468DA-AR Rear Drive Wheel w/o tire w/ Alloy Rim (Style A)
- 468KA Rear Drive Wheel w/o tire (Style B)
- 468K Rear Drive Wheel w/ tire (Style B)

#### 468KA-AR Rear Drive Wheel w/o tire w/ Alloy Rim (Style B)





#### Transmission and Related Parts

301 Coaster Brake Hub (PTCB)
4914HC Chain 1/2x1/8x97 links (PT, PT2F)
4914E Chain-Short (PTCB, PT3CB)
4914R Chain half-link:1/2+x 1/8+
4910P-PT-BLK Chainguard (Black Plastic)

#### **Miscellaneous Parts**

5927BLK-C Rear Basket (Black Vinyl Coating) 5030T Reflector Kits for Tricycles

\*\* On 3 speed models, please note the brand and shifter style. Your Worksman PT3CB will be equipped with a quality 3 speed and shifter, but brand and shifter style may vary. Parts listed here are the most commonly used Sturmey Archer style. For Shimano Parts, call 718-322-2000.

Accessories .	Options and accessories are always be	ing adde	ed! Visit www.worksmancycles.com for a complete list!
3979	Ding Dong Bell	3973	Battery Operated Mega-Horn
303	Squeeze Bulb Horn	3961	Cup Holder
101710	Flashing Strobe Light- White Lens	101714	4 Flashing Strobe Light- Red Lens
7917T1	Back Rest	133WH	H Front Basket w/ bracket (Easily removable w/ handles!)
7217GS12	Flashing Light Pedals (Very cool!)	202	Mini Frame Air Pump
1006	Foot Pump	201	Cable and Pad Lock w/ Key
P19	Adult Helmet		

Limited Warranty: Commercial use voids this warranty. This is a consumer model. Worksman makes a full array of industrial and recreational cycles. Shipping issues or damage must be reported within 15 days of receipt. Only one (1) warranty shipment will be made per order, so inspect cycle fully before reporting damage. This cycle is warranted against faulty parts under the following conditions: This warranty does not cover any failure due to accident, abuse, misuse, neglect, or as a result of normal wear and tear, or by assembly errors performed by a non-qualified mechanic. The frame including all welded joints is warranted to be free of defects in material and workmanship for one (1) year while in the possession of the original purchaser. All other parts on this cycle (except tires and tubes) are warranted for 90 days from date of purchase. Proof of purchase is required for any claims being considered. The manufacturer reserves the right to have all defective parts returned at purchasers expense for examination prior to resolving the claim. If upon examination the manufacturer deems the part to be defective and within the warranty period, a replacement part will be sent at no charge. Unauthorized repair of parts voids warranty. Proper maintenance is required for the warranty to be valid. If it is determined by the manufacturer or the dealer that the part in question is not covered under warranty, we will advise the cost to repair or replace the part. The sole responsibility of the manufacturer pursuant to the terms of this warranty is the replacement or repair of the parts in question. The liability of the manufacturer shall in no event exceed the original purchase price of the model and the manufacturer shall not be liable for any consequential damages of any nature including but not but not by way of limitation damages for personal injuries or to property. This statement constitutes the exclusive expression of warranties by the manufacturer and is in lieu of any and all other warranties including expressed warranties, any implied warranties, including but not limited to warranties of merchantability and fitness or purpose, are limited in duration to one year of purchase for the frame (excludes fork) and ninety (90) days for other parts as covered in this warranty. Cycles are not intended for off road use, stunt riding or similar activities. Should an approved electric bicycle assist be added to the cycle, the purchaser is responsible for meeting any local laws. Such modifications void warranty. Void where prohibited by state law. The seller is not responsible for typographical errors or omissions. Manufactured by Worksman Trading Corporation.

# <u>Braking System</u> <u>&</u> Recommended Weight Capacity

	FT Drum	FT Caliper	C/B	3 Speed C/B	Recommended Weight Capacity
РТ	Х				210
PT2F	Х	Х			215
РТСВ	Х		Х		225
РТЗСВ	Х			Х	225

Visit www.worksmancycles.com to see our full line of quality Worksman Cycles!

404SA 3 Speed CB Hub w/ Shifter (PT3CB)
4914M Chain Connecting Link
4914L Chain-Long (PTCB, PT3CB)
4916 Chain Idler Sprocket

SA14-1 3 Speed Shifter and Cable (Sturmey Archer\*\*)

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