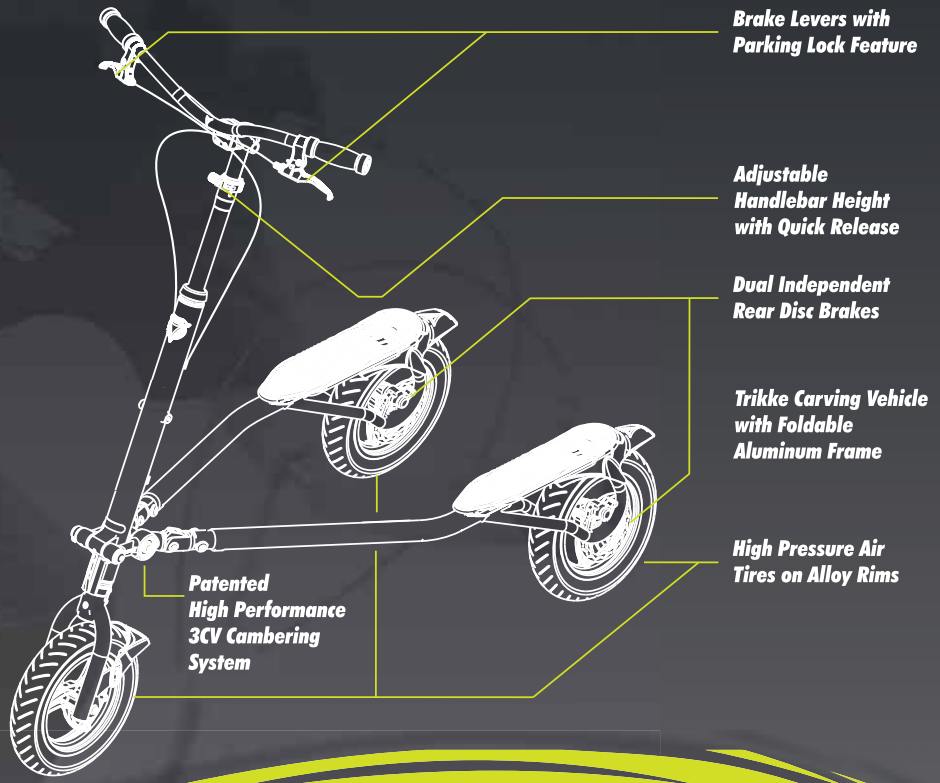
TRIKKE™

CARVING VEHICLES

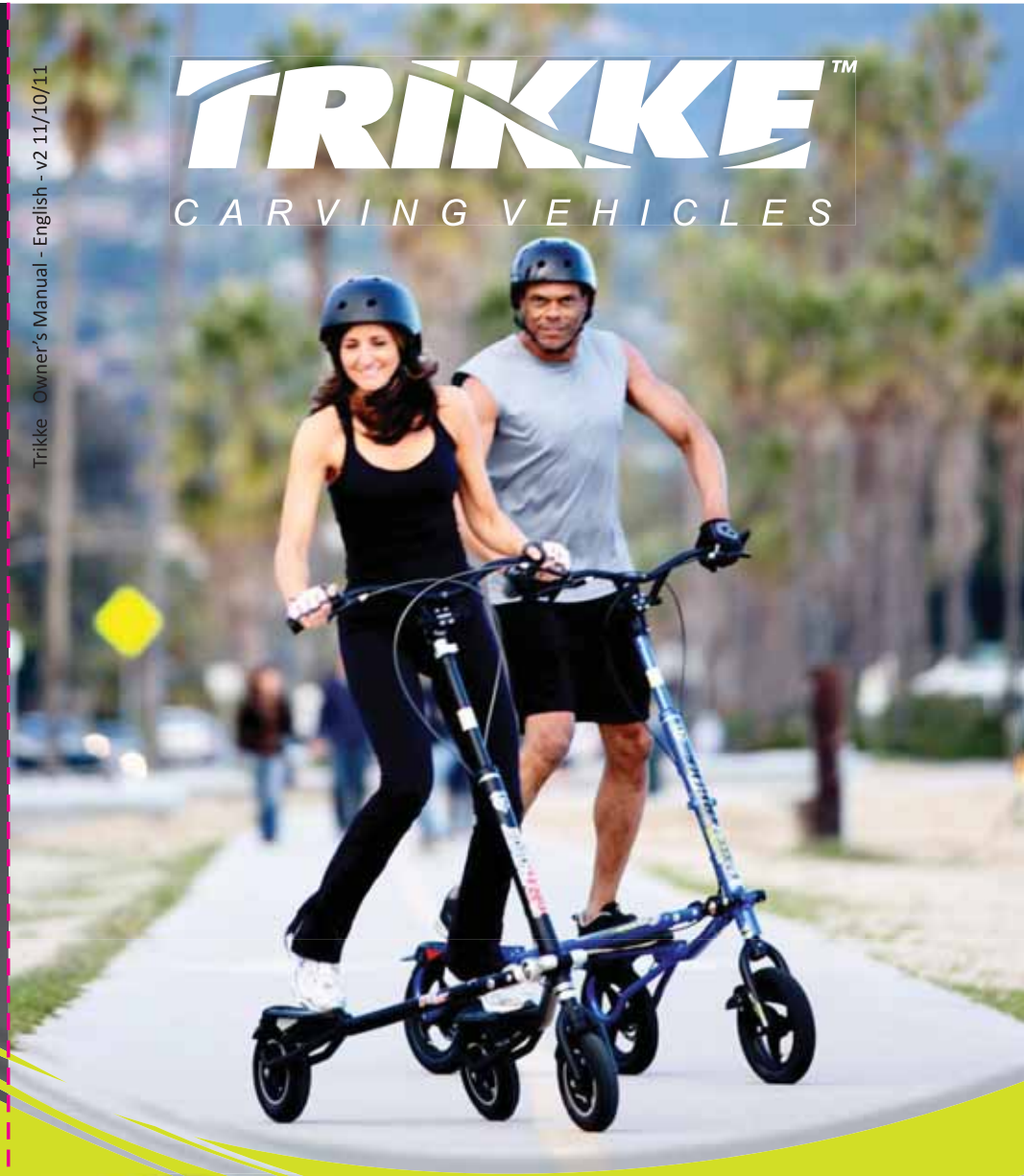


trikke.com

Trikke Owner's Manual - English - v2 11/10/11

TRIKKE™

CARVING VEHICLES



INSTRUCTIONAL DVD INCLUDED

Owner's Manual

THIS MANUAL IS FOR THE FOLLOWING MODELS:

T8 Sport

T12 Roadster

CONGRATULATIONS ON YOUR PURCHASE OF A NEW TRIKKE CARVING VEHICLE!

You'll learn all the riding subtleties with time. Going effortlessly, or going hard. The T8 or T12 are the top of the line in performance, quality and were designed for more a advanced riding.

If you have never carved down the road on one of our 3-wheeled cambering vehicles before, you are about to have a great, new experience. You will discover an entirely new way to propel across pavement. But you'll do it in an engaging, ergonomic, non-impactful way... that just happens to give you a phenomenal full-body, calorie-burning, fat-shedding workout.

And. It's fun.

If it's just the thrill of the ride you're after (and you could care less about the fitness side-effects) you will not be disappointed. After more than ten years, we are still always discovering nuance in the ride. New combinations. New senses of flow. Arm punch-drive to handlebar pry to toe-kick whipper. Relax. Breathe. Punch-the-bag sprint to a nice-and-easy cruise. Ahhh. We're enjoying with more passion than ever before. Go ahead. Have a blast in a parking lot - for hours - it's common. Take long nature rides or rediscover your neighborhood - recommended.

Remember to relax as you learn. Allow your body to be active but relaxed. When learning anything new, we believe that you will learn much quicker if you quiet the mind and let your body do what it knows how to do best. That's not to say to go ahead and check out. You're not getting a massage here.... Remain aware and alert and active, but relaxed. You want to get into the flow. The better you flow, the easier and smoother you'll go. And for speed? Just add power = driving with the arms and pumping with the legs. The more power you add, the faster you will go.

We recommend that you give a look to the instructional DVD, or go online to
www.trikke.com/how-to-ride
and review our videos. Watch and imitate. Let your body imitate the flowing motion.

Thanks for taking this step with us. You're part of something new and good for you.

IMPORTANT MUST READ WARNINGS, SAFETY INFORMATION AND RIDING TIPS

Thank you for purchasing a Trikke™ product. This owner's manual is designed to help you make the most of your Trikke carving vehicle. Instructions and warnings have been carefully prepared to make your experience as safe and enjoyable as possible. Use common sense while riding and enjoy your new Trikke carving vehicle. Read additional information on page 16.

READ AND UNDERSTAND the assembly, maintenance and safety sections of the owner's manual before riding. Always follow the instructions and pay attention to all warnings.

- **Always wear proper safety equipment when riding the Trikke Carving Vehicle** including an ANSI, SNELL, CPSC, ASTM or DIN EN 1078 approved helmet. Use proper footwear and secure laces on shoes before riding.

- **Avoid water, bumps, gravel, sand, cracks, uneven surfaces or obstacles** that may stop you suddenly or cause you to lose control. The Trikke Carving Vehicle is not intended for off-road use. Avoid riding at night.

- **Hands free riding can be dangerous.** Use both hands to hold the handlebars firmly at all times. Do not push too hard on or apply uneven pressure to either side of the handlebars. **Do not make sudden sharp turns or apply your body weight to the handlebars when turning.** Such actions may cause the vehicle to "jack-knife" or to stop suddenly, which can cause serious injury to the rider.

- **Stunt riding, riding backwards and/or extreme riding are not recommended on the T8 or T12. Riding in this fashion may damage the product and voids the warrranty and may result in injury or death.**

- **Do not lean back or pull back on the handlebars.** Doing so can cause the rider to fall off the back of the vehicle possibly resulting in serious injury or death.

- **Polyurethane wheels do not perform well on wet pavement or any other wet surface.** Polyurethane loses traction on most wet surfaces, and water on the wheels can dramatically reduce the effectiveness of the brakes. If you must ride in wet conditions be very careful to avoid sliding out and do not carve hard turns.

- **Downhill riding is not recommended, especially for novice riders.** The Trikke Carving Vehicle is designed primarily for use on flat dry pavement. Riding on steep hills or doing prolonged downhill rides is not recommended. Prolonged use of the brakes will causethe rear polyurethane wheels to wear down prematurely, dramatically reducing the effectiveness of the brakes or even causing them to fail. Extreme caution should be used when riding on any hill.

- We recommend that you **do not exceed the recommended maximum rider weight limit** - Trikke T8 and T12 weight limit: 250 lbs (114 kg).

- **Always inspect the vehicle before each ride** and make sure that the handlebar quick release and the folding mechanisms are securely locked in the proper riding position. Read the assembly section of the Owner's Manual for important assembly and maintenance information.

- **Test the brakes for proper function before each ride** and do not turn the handlebars more than 180°. The brake cables can wrap around the steering column and possibly engage the brakes. Make sure that your brake cables are not wrapped around the steering column before each riding session. Always apply both brakes evenly with your weight distributed evenly over each rear wheel.

- **Children should always be supervised by an adult when riding.** It is the parent or guardian's responsibility to properly maintain and inspect the vehicle before each riding session. The Trikke Carving Vehicle is not recommended for children under 13 years of age.

- Always exercise extreme caution when you are riding in proximity to other vehicles, pedestrians, and especially in proximity to cars if you are riding on a street. Be sure to obey all rules of the road. Please be courteous to riders of other vehicles and all pedestrians. Share the path!

- **Do not modify your Trikke carving vehicle.** Only use Trikke Tech, Inc. Approved parts or accessories. See the limited warranty for other use restrictions.

GENERAL WARNINGS

- If you do not have the proper tools or find that you are unable to understand the assembly instructions, have a qualified Trikke dealer assemble the Trikke carving vehicle for you.

- If a Trikke dealer assembles the vehicle for you, be sure to read the Riding and Safety sections of the owner's manual before riding for the first time.

- Immediately stop riding if you suspect that any part of the vehicle is not functioning properly. Inspect the vehicle closely to confirm what the problem is. Contact your dealer or Trikke Tech, Inc. directly if you suspect that a malfunctioning or defective part is affecting its safe operation.

- The front wheel is turned exactly 180 degrees to that of a bicycle. Unlike a bike, a carving vehicle's front wheel actually trails behind the fork. Altering this wheel position will change the intended performance of the vehicle. See the photo on page 6 of this manual to see the proper position of the front fork.

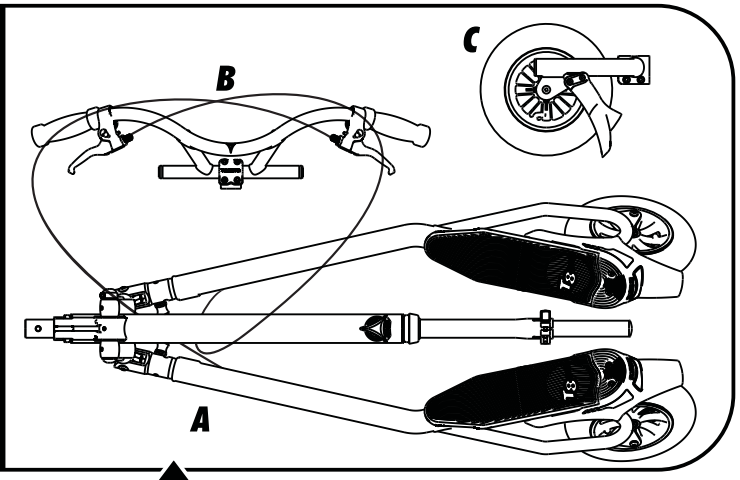
- Riders performing in Trikke Tech, Inc. produced videos and photos are highly skilled and specially trained professionals. Do not try these tricks yourself or you may lose control and fall causing serious injury and even death.

KNOW THE TRIKKE CV

TRIKKE ASSEMBLY

T8

A. Frame
B. Handlebar
C. Front Fork
D. Tools
E. Manual with DVD
F. Water Bottle

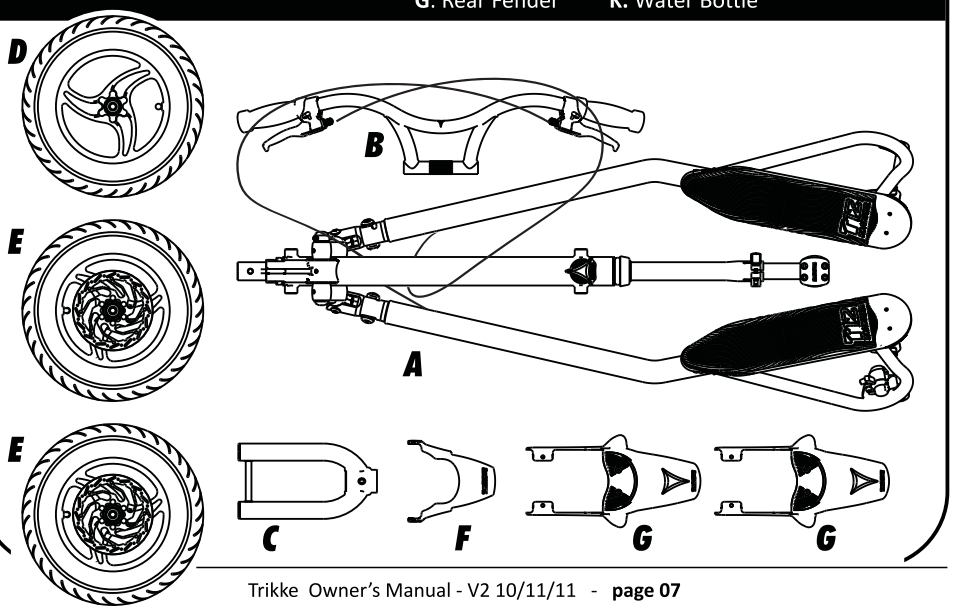


1 Remove the Trikke CV from the box and check contents.

NOTE:
T8 model > skip to step 4

T12

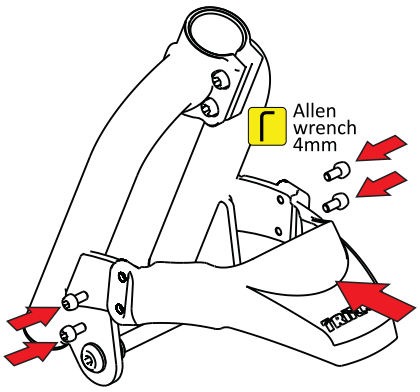
A. Frame
B. Handlebar
C. Front Fork
D. Front Wheel
E. Rear Wheel
F. Front Fender
G. Rear Fender
H. Hardware (bolts + nuts)
I. Tools
J. Manual with DVD
K. Water Bottle

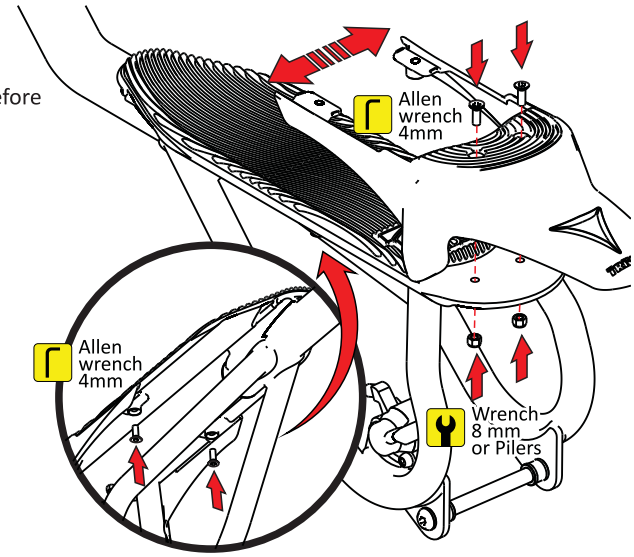


2 Install the fenders.

T12 ONLY

You need install the fenders before install wheels.

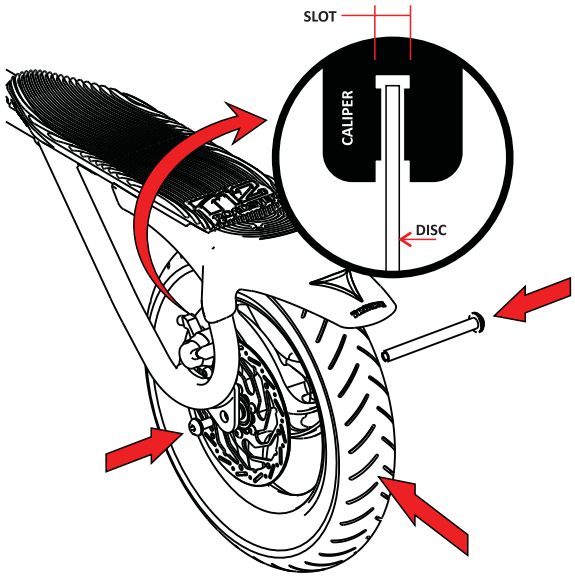


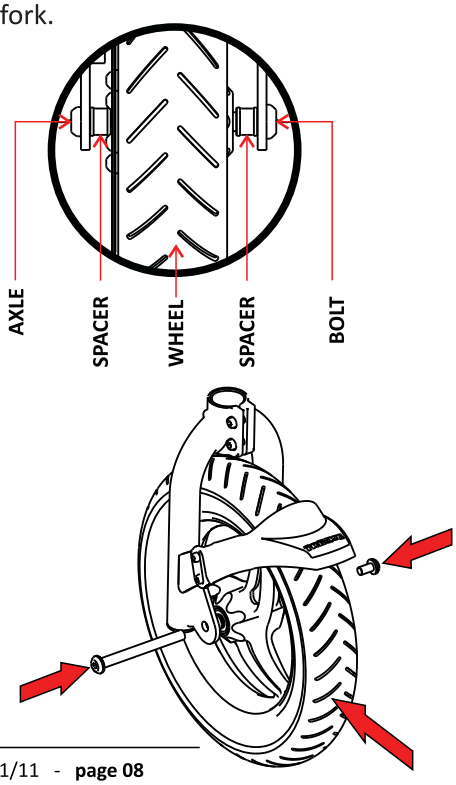


3 Attach the wheels to the arms and front fork.

T12 ONLY

Allen wrench 5mm





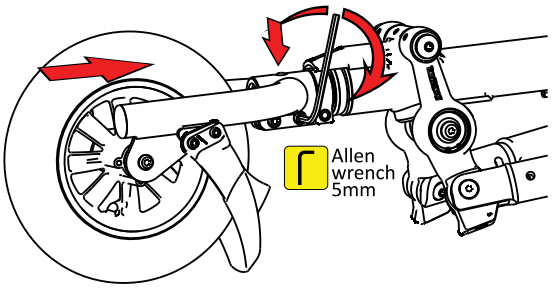
4 Attach the front fork.

Inspecting the fork post you will find a spring loaded locking pin . You will also find a hole to secure the locking pin on the front face of the fork. This pin is similar to that of a beach umbrella.

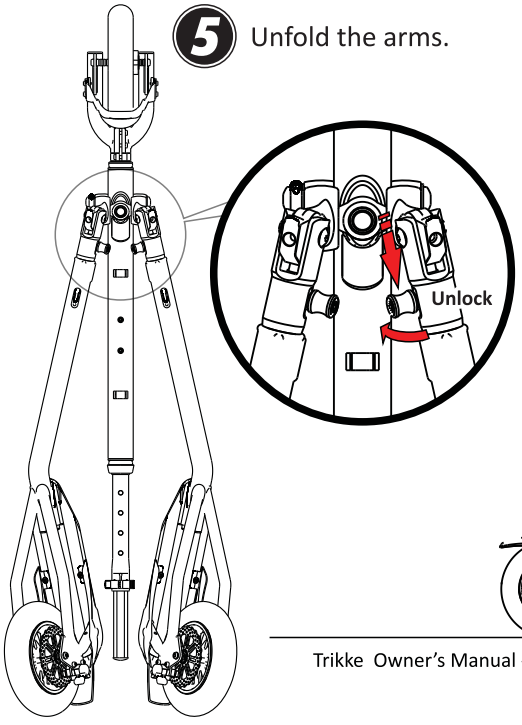
Simply align the locking pin with the hole and push the front fork onto the fork post until the top of the fork and the locking pin meet.

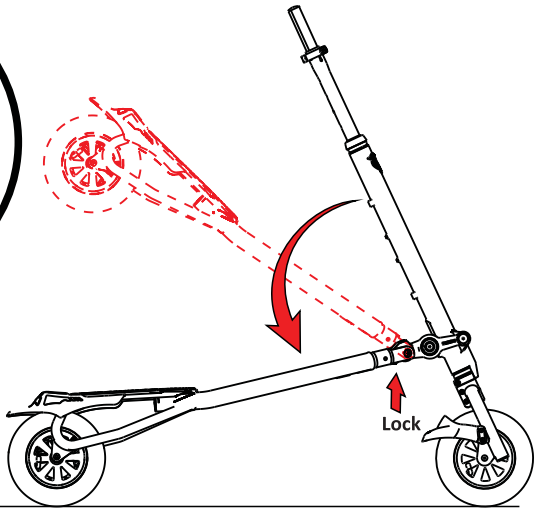
Depress the locking pin and slide the fork the final inch or so until the locking pin snaps into the hole.

Now all you need to do is use the 5mm Hex wrench to **firmly tighten the two bolts.**



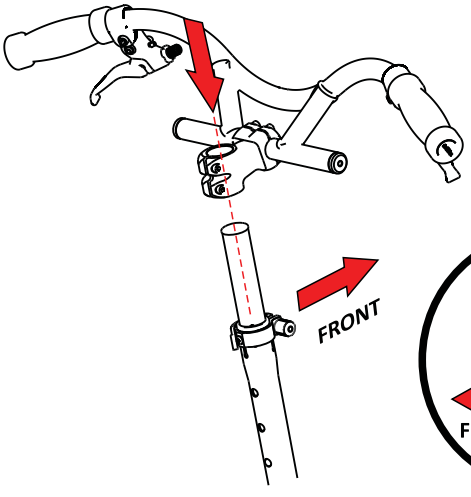
5 Unfold the arms.

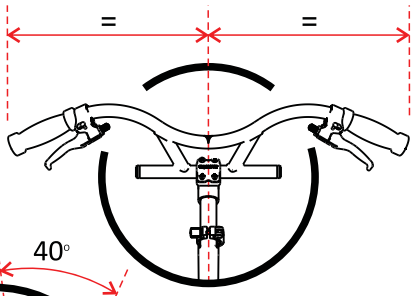


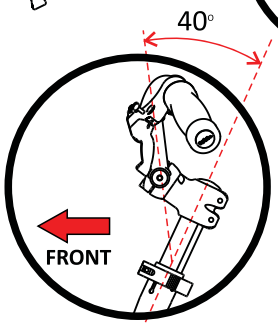


6 Install the handlebar.

Allen wrench 4mm



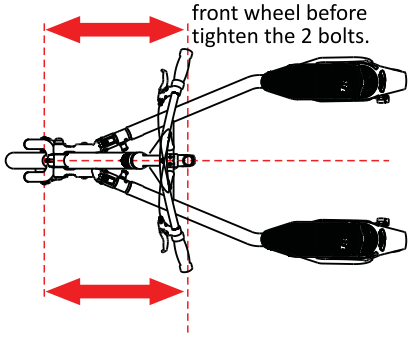




Your Trikke cambering vehicle comes with the handlebars assembled to the stem at an angle appropriate for most beginning riders. The angle of the handlebars may be adjusted by loosening the stem plate at the front of the stem.

To install the handlebar assembly requires a 6mm Hex wrench (supplied). Slide the stem over the stem post and tighten the two clamp bolts **(arrow right)** with the 4mm Hex wrench. **It is important to align the handlebars with the front wheel before tightening the stem bolts.**

Align the handlebar to the front wheel before tighten the 2 bolts.



FINAL ASSEMBLY CHECK LIST

1. When you think that you have completed the assembly process, study the vehicle one more time and compare it to the photograph on page 6.

2. Check the bolts that secure the front fork and handlebars. A good push and pull on the handlebars will immediately indicate whether or not the stem plate is properly secured. The handlebars should not be able to rotate on the stem - even with all of your weight pushing on it.

3. Do a final brake check by spinning both rear wheels. They should spin freely until you apply the brakes. You should be able to vigorously squeeze the brake levers without the levers depressing all the way to the handlebar.

4. Always check all of the bolts before riding to insure that the vehicle and all of its components are operating properly.

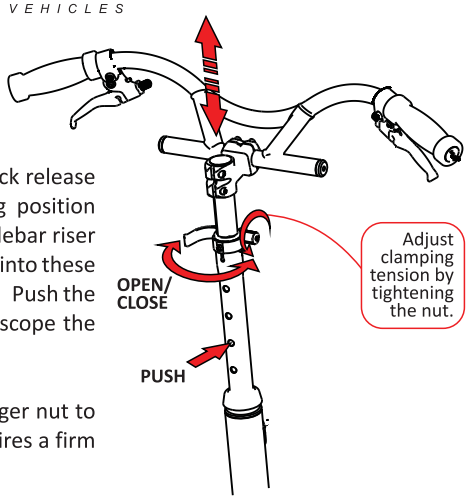
ASSEMBLY QUESTIONS OR REPLACEMENT PARTS

For any questions regarding your Trikke replacement parts or accessories, please go to the www.trikke.com website for further details.

CAUTION ⚠

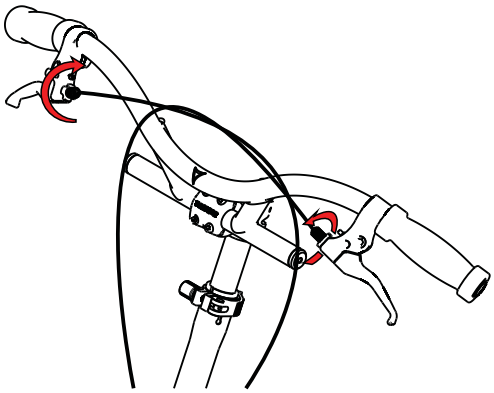
BEFORE RIDING FOR THE FIRST TIME, PLEASE TAKE SEVERAL MINUTES TO GO OVER THE IMPORTANT RIDING AND SAFETY TIPS ON PAGE 3 AND 4 OF THIS MANUAL.
FOR THE SAFETY OF FRIENDS AND OTHERS WHO WILL TRY YOUR NEW TRIKKE PRODUCT, IT'S YOUR RESPONSIBILITY TO COACH THEM ABOUT SAFE RIDING. MAKE SURE THEY READ AND UNDERSTAND ALL WARNINGS AND SAFETY INFORMATION IN THIS OWNER'S MANUAL BEFORE RIDING.

Adjusting the height of the handlebar



Raise the steering column by first unlocking the quick release lever. Notice that there are some height locking position signified by round holes down the back of the handlebar riser tube. There is a spring loaded locking pin that snaps into these holes to provide a second level of safety while riding. Push the locking pin in to release the steering tube and telescope the handlebars up to your preferred riding height.

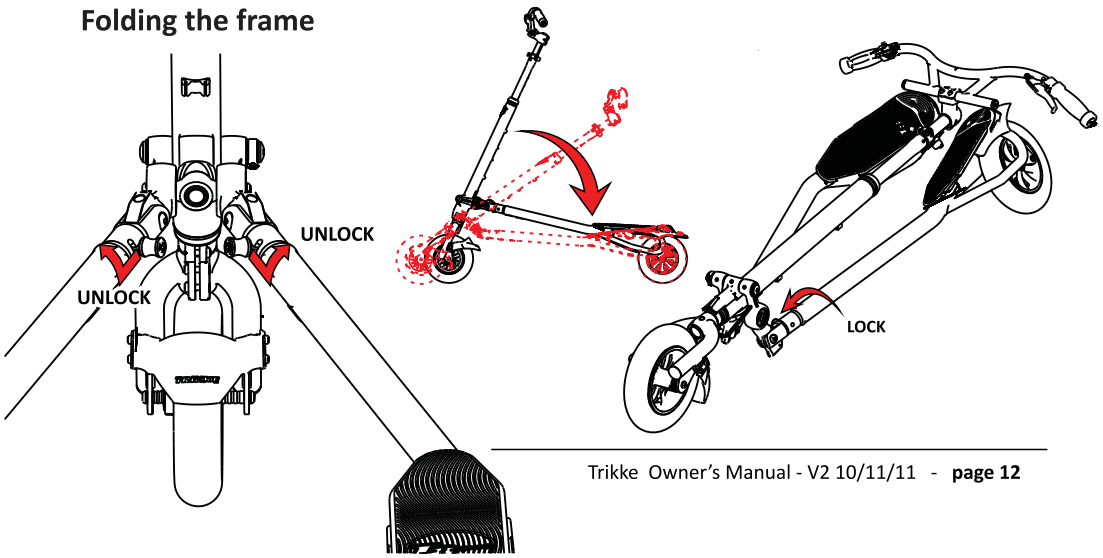
If the quick release is loose, use the adjustment finger nut to tighten the quick release. Properly adjusted, it requires a firm hand to close.



Brake tension adjustment

Turn the brake tension adjustment screws as far in or towards the brake-handle as they will go. The brake tension adjusters can be found where the brake cables enter the brake levers on the handlebars. You will actually adjust the brakes in Step 6 before making final adjustments, but by doing this step, you will optimize your adjustment capabilities while riding.

Folding the frame

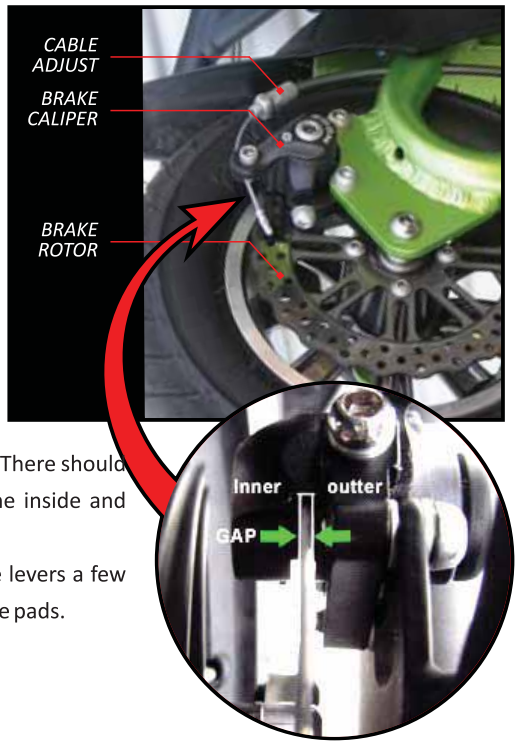


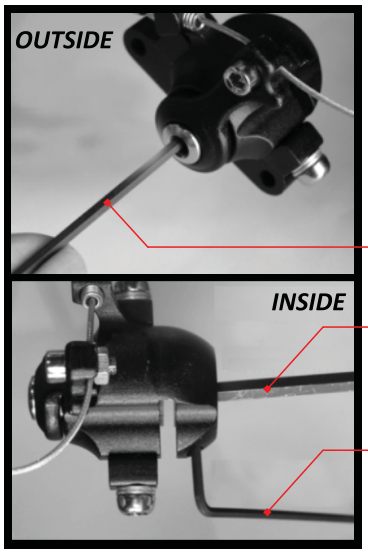
Brakes

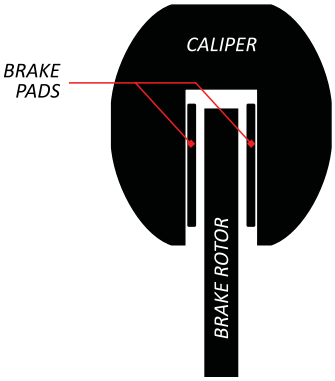
The disc brakes come preset from the factory. We recommend that you check the brakes before the first use (and before every ride), squeezing the brake levers repeatedly to feel the tension in the brake cable. Then check if the rear wheels spin freely, or if there is some noise when the brake is not being applied. Also make sure that the brakes work enough to stop the moving vehicle and parking brakes hold up well when locked.

If necessary adjust the brakes, the following describes the basic procedures:The images to your right shows a disc brake installed correctly. There should be a gap on both sides of the brake disc to the inside and outside brake pads.

Before adjusting disc brakes, squeeze the brake levers a few times to stretch the brake cable and seat the brake pads.







Adjust Brake Cables:

First, make sure that the brake cables are in place on the stays and the cable adjustment is set to a minimum – both adjusting screws at the brake handle and at the brake caliper must be fully retracted. The brake cables should be in proper positions, inserted in the stays and show no kinks. The pulling lever of the caliper must be set at 25mm from the cable stopper (see figure 7 - page 14).
Spin each wheel. If there is a visible warping on the rotor, mark where the rotor is off and use your fingers to bend the rotor in or out to straighten it. Repeat this procedure until the disk rotates without oscillations. (This is a common procedure, because the discs are thin and can deform easily. With use, and consequent increase in temperature, the disc tends to straighten itself).

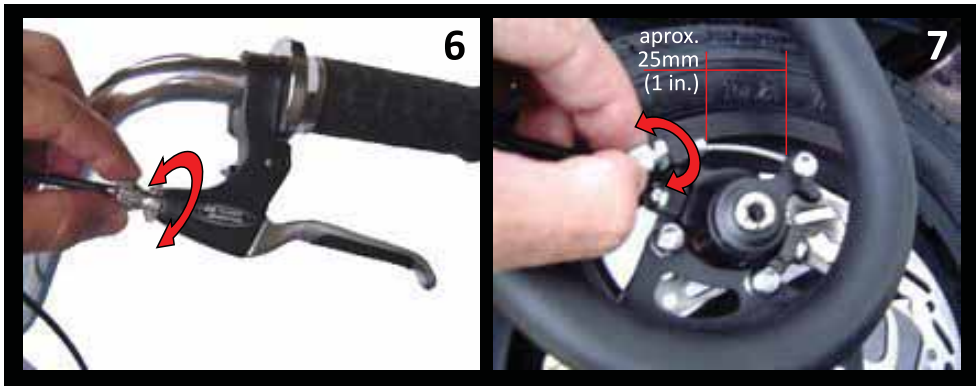
Adjust the inner pad **(this pad is fixed and doesn't move when applying brake):**

Loosen the set screw of the inner drum (step **2a**, use 2.5 mm allen wrench) to unlock the movement of the inner brake pad. Move the inner pad in or out against the disc as required (step **2b**, use 5 mm allen wrench). After adjustment, the set screw of the drum must be tightened to lock and prevent vibration.

Outer pad adjustment **(this pad moves towards the disc when applying brake)**

Move the outer brake pad in or out as necessary (step 3, use 3 mm allen wrench) - note that the adjustment screw is inside the hole at the bottom - do not loosen the 5mm allen.

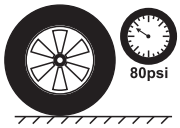
After some time of use, the brake pads will wear out a little and the brake cable will stretch and the brake will need to be adjusted tighter in order to work efficiently. Readjust the brake by turning the fine adjustment screw of the brake lever at the handlebar (figure 6); or the adjustment screw of the cable stay at the brake caliper (figure 7).



Tires

The front and rear tires of the T8 or T12 come with lower pressure from the factory, for transport reasons. You will have to adjust tire pressure according to the weight of the rider and usage preferences. Do not exceed the recommended tire pressure.

Example of recommended pressure:

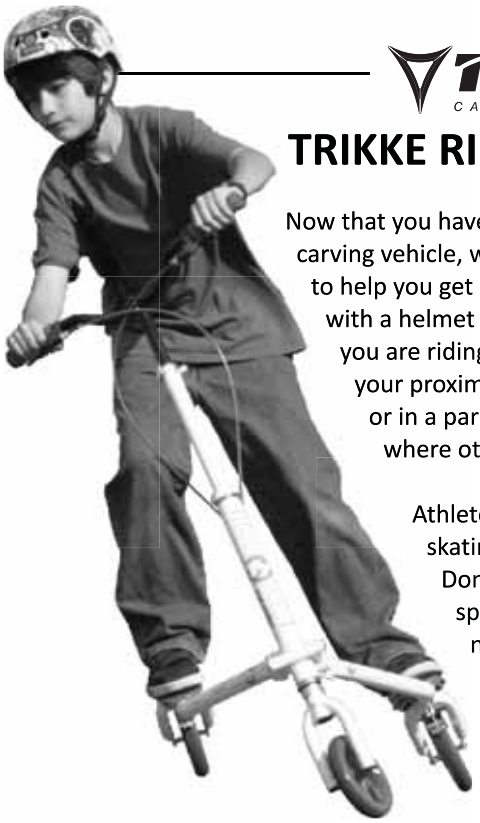


TIRE TYPE	RIDER'S WEIGHT	
	170 lbs (75kg)	**230 lbs** (102kg)
FITNESS TIRE - FRONT	**70 psi** (4.8 bar)	**80 psi** (5.5 bar)
FITNESS TIRE - REAR	**80 psi** (5.5 bar)	**90 psi** (6.1 bar)

Lower pressure makes a smooth ride, but will require more energy due to increased rolling resistance. Higher pressure reduces rolling resistance and increases mileage, but it makes a bumpier ride.

CHECK TIRE PRESSURE ONCE A WEEK - using a tire gauge.

Do not run with very low pressure, as this can damage the tires and increase the risk of a fall.
Particularly the front wheel (motor wheel) should not be calibrated with a pressure higher than recommended, as this can damage the engine due to the reduction in impact cushioning.



TRIKKE RIDING MANUAL

Now that you have successfully assembled your new Trikke™ carving vehicle, we will take you through some simple riding tips to help you get started. We always recommend that you ride with a helmet and safety gear. Pay special attention to where you are riding, your proximity to other people, and especially your proximity to cars if you are learning to ride on a street or in a parking lot. Please exercise repectful path etiquette where other riders and pedestrians are onthe same path.

Athletes who are accustomed to skiing or inline skating typically pick it up in a matter of minutes. Don't be discouraged if you can't climb on and speed away at 15 miles per hour. Being an entirely new vehicle, it requires some new skills. Regardless of your athletic background, you can learn to ride a Trikke carving vehicle in a relatively short period of time - usually in less than an hour.

THE GREATEST WORDS OF WISDOM ARE:
"Keep going until you feel the sweet spot."

Please note: If friends or family are riding for the first time, for their safety please take the time to properly instruct them and have them wear safety equipment.

You are now embarking on a totally new experience. Not often does a new technology emerges to change our way of thinking about motion and its application. Conservation of angular momentum is the physical principle that the Trikke carving vehicle harnesses in order to transfer the rider's energy into forward momentum.

It is the painstaking research and development by Trikke Tech over a period of 12 years that has optimized the melding of this principle with a human powered vehicle.

The exclusive 3CV™ Technology developed by Trikke Tech is the mechanism that makes this forward propulsion possible. The unique carving mechanism is elegantly simple yet provides the necessary rigidity, geometry and resistance to the rider's motion to allow for optimum control, speed, comfort, durability and especially rider confidence. You are now the owner of the original Trikke carving vehicle.

SAFETY ISSUES

THE FOLLOWING FIVE WARNINGS HAVE BEEN SELECTED FROM THE LIST AT THE BEGINNING OF THIS MANUAL FOR MORE IN DEPTH DESCRIPTION AND INSTRUCTION. PLEASE READ AND UNDERSTAND THESE AND ALL WARNINGS BEFORE RIDING.

SAFETY ISSUE #1: RIDING IN WET CONDITIONS

Because Trikke™ carving vehicles use hard polyurethane wheels, we want to warn you about the potential hazards of riding on wet pavement. Just like inline skates or skateboard wheels, Trikke wheels become very slick when wet, and the vehicle can come right out from under you if you are not very careful how you are carving turns in wet conditions. If it's raining or the pavement is wet from dew or drizzle we do not recommend that you ride without extreme caution and awareness of the potential for sliding out. If you encounter a puddle or a wet place in the pavement that you cannot avoid, you may want to walk the vehicle until you are on dry pavement again. If you fi nd yourself on wet pavement at any time while riding, you may want to coast straight through the wet area without turning. When you reach dry pavement, give the wheels a few rotations to dry off before you to any turns. Experienced riders may ride on wet surfaces because they understand they might slide out any time and they are ready for it.

SAFETY ISSUE #2: WEIGHT DISTRIBUITION

Since you are essentially standing directly above the rear wheels, it is quite easy to go over backwards by leaning back. Be careful to not lean back or distribute your body weight behind the rear wheels. This warning is especially important for riders with restricted movement, or reaction time. Great care should be taken to avoid getting into a situation in which you have to quickly dismount the vehicle. If you are standing still on the vehicle it is always recommended that you keep the brakes on. If for some reason you feel yourself going off the back, putting the brakes on will help stop the vehicle from scooting out from under you, but you should always step off as a precaution.

The best way to insure that you are always positioned properly on the vehicle and to minimize the potential for going off the back is to distribute your weight evenly between the front and rear wheels. Accordingly, you should not lean forward over or onto the handlebars either but rather move your toes up to the front of the foot platforms and always let the balls of your feet and toes carry most of your weight. Avoid rocking back on your heels, pulling back on the handlebars or sticking your butt out behind the rear wheels. If you put too much of your body weight over the rear wheels or behind them (in the case of sticking your butt out) you will inevitably un-weight the front wheel. Besides the risk of going off the back, the other reason for evenly distributing your weight is to insure that your front wheel has plenty of traction, which leads us to the next safety issue.

SAFETY ISSUE #3: HANDLEBAR ETIQUETTE

Properly managing the handlebars and especially how far to the left and right you turn them while you are riding is vital to your safety. Because the front wheel has been designed to trail the fork, the handlebars have a tendency to turn on their own in the direction that you are leaning the vehicle. Unlike a bicycle, which wants to go in a straight line, the front wheel will actually accentuate a turn. Because of this condition, new riders need to pay special attention to not over steer. Over steering can cause the handlebars to cross up or "jack knife" which will stop the vehicle suddenly and possibly cause an injury. Always maintain fi rm control of the handlebars with both hands and never ride with one or no hands. The Trikke carving vehicle requires both hands on the handlebars at all times.

First time riders have a tendency to muscle the handlebars and throw their weight from side to side. What propels the Trikke carving vehicle forward is a combination of turning and leaning the steering column, not jerking or thrusting the handlebars from side to side. It is best to think in terms of more rocking and less turning. Long smooth turns are best for beginners.

Because the handlebars are free to spin 360 it is possible for the brake cables to get twisted around the steering column. If you try to ride with the cables twisted the vehicle will probably feel sluggish because one of the brakes is probably partially engaged. Before riding, always check to see that the brake cables are not wrapped around the steering column.

SAFETY ISSUE #4: RIDING DOWNHILL

Because the Trikke carving vehicle is a totally new machine with completely foreign riding characteristics, we strongly recommend that you take your time when familiarizing yourself with the vehicle and gradually test the performance boundaries of its riding characteristics. This is especially important before attempting to ride up or down hills. Both hill climbing and downhill riding are advanced and require that you become a strong competent rider before even attempting hills --- up or down. As far as downhill riding is concerned, we strongly recommend that you only ride down hills in which you can control your speed with turns as you traverse the hill. Riding hills at speeds that require constant braking is not recommended for three reasons: you can get up to speeds where your braking distances are too long to stop you safely, you can fall causing serious injury or death, and you will quite simply wear down your brake pads and rear wheels long before their expected functional life expectancy.

The Trikke carving vehicle will accelerate quickly down even the mildest grades, so only ride at speeds and in an environment that are suitable for your skill level.

SAFETY ISSUE #5: SAFETY EQUIPMENT

Always wear safety equipment, especially a helmet. A helmet is a must when riding a Trikke carving vehicle or any wheeled vehicle for that matter. We also recommend that you wear elbow and knee pads (especially for children and inexperienced riders). As stable a platform as the vehicle is, there are always environmental conditions that might catch you by surprise like cracks in the pavement or other vehicles.

READ AND UNDERSTAND THE ASSEMBLY, MAINTENANCE AND SAFETY SECTIONS OF THE OWNER'S MANUAL BEFORE RIDING. ALWAYS FOLLOW THE INSTRUCTIONS AND PAY ATTENTION TO ALL WARNINGS.

Visit our website at **www.trikke.com** if you want to purchase a helmet, knee and elbow pads.

HOW TO RIDE

STEP 1: MOUNT THE TRIKKE

First, find some smooth, flat and open terrain to ride on. Parking lots, basketball courts or tennis courts are perfect places to learn. It is best to spend plenty of time riding on flat ground before attempting hills - up or down, and do not assume that you already know how to ride a carving vehicle. Even though it has familiar features like handlebars and hand brakes, carving vehicles have unique riding and balance characteristics that require a familiarization period. The vehicle is easy to stand on. We recommend that you step up onto the vehicle and spend a few minutes getting used to the riding position, the braking system, and especially the range with which you can rock the steering column left and right. This is especially important because it is exactly this rocking capability that propels the vehicle forward. Get used to letting your arms do the rocking --- not your body.

STEP 2: ROCK THE TRIKKE

We recommend that you push off a few times like a scooter and simply ride around for a few minutes to get used to the feel. It is especially important to establish a good riding position that properly balances your weight between the front and rear wheels. First time riders have a tendency to pop unnecessary wheelies. This can be dangerous because you can fall back and injure yourself. Scooting your toes to the front of the platforms and riding on the balls of your feet will help to distribute your weight to the front wheel. Also, properly set, the handlebar height should force you to lean a bit forward. This riding posture will give you much better stability, control, and quick braking response. Never lean back or pull back on the handlebars.

You can actually start moving without touching your feet to the ground by rapidly turning the front wheel back and forth. You will begin to pickup speed but will peak at only a few miles an hour. Here is where it all comes together!

You are now turning the wheel back and forth to generate forward motion and establishing a rhythm. No matter how bad you might be as a dancer, the Trikke experience is very rhythmic in movement and timing. Stick with it. You'll get it. The beauty of what drives the Trikke carving vehicle's design forward is the addition of one final ingredient:

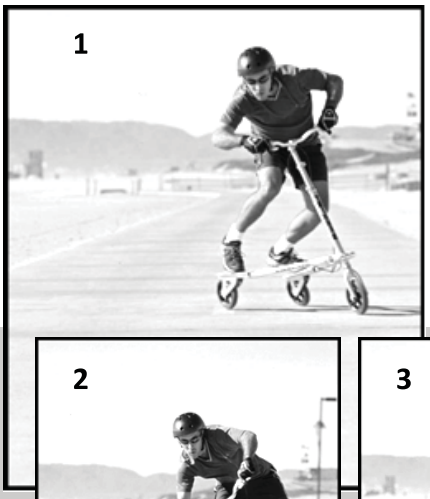
ROCKING THE STEERING COLUMN LEFT AND RIGHT AS YOU TURN THE WHEEL LEFT AND RIGHT. A LEFT HAND TURN GETS A LEFT HAND ROCK.

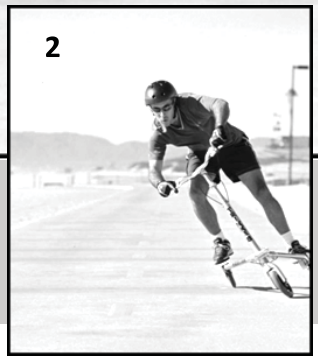
When you add the rock to the roll you are essentially putting the rear wheels in a subtle yet responsive position to generate forward thrust. It will take a few minutes to catch on to a coordinated combination of turning and rocking, but to those who have any skiing or inline skating experience you will immediately feel the similarities.

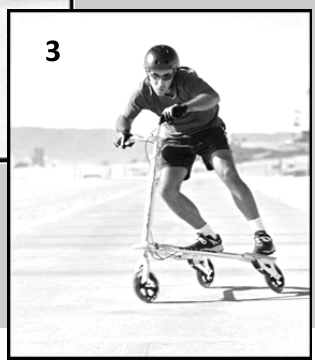
Your speed should pickup dramatically, and you will begin to thrust forward with each turn. Please note that it does not require that you make tight turns. Rather, you should allow the vehicle to kind of steer itself in a more graceful curving path.

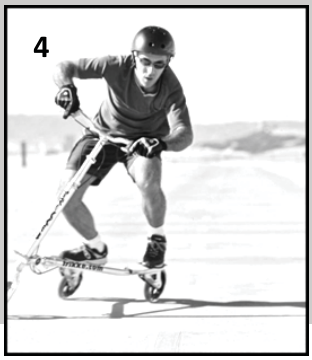
Many first time riders tend to exaggerate the turning of the handlebars thinking that they need to continue with tight turns. Not so! The degree of your turns should diminish as you begin to add the rocking motion and as your speed increases. Turning too hard can cause the vehicle to "Jack-Knife" potentially causing you to fall. Take your time.

Whatever you do, do not muscle the handlebars. Experienced riders use a light touch on the handlebars mostly for balance.









STEP 3: WEIGHT TRANSFER

By this time you have dramatically increased your speed and should be getting to know where the sweet spot is. When we say "sweet spot," we mean the part of your turn where most of your propulsion is generated. Typically, you will feel the outside wheel (your left rear wheel during a right hand turn) drift away from you as you rock the vehicle to the right. If you apply a little weight or a kick to that left foot as you turn you will accelerate even more. A seasoned rider can actually propel the vehicle up to 18 miles

per hour or better on flat ground…which is really moving.
The combination of these techniques will be new to you for sure, but be assured that riding time will help you to create a smooth and beautifully coordinated movement. You will be able to travel for miles with long graceful strides and rapid sprints. The beauty of it is that you will always be looking ahead for places to carve and to add the skiing dimension to what would have been a straight line ride on any other vehicle.

STEP 4: HILL CLIMBING

Don't be afraid to tackle hills, but make a point of graduating to steeper and steeper climbs as your riding skills increase. We always say to new riders that hill climbing is an acquired skill. You can try it, but you'll probably frustrate yourself more than anything if you don't first learn and master the basic skills of riding on flat ground. The Trikke™ carving vehicle does slow down dramatically as you begin to climb a hill, requiring a new and physically challenging technique to be added to your growing Trikke repertoire.

Hill climbs require much more upper body finesse --- especially on steep grades. If you are riding in an area that has unavoidable hills, we recommend climbing as much as you can just to challenge yourself and then just walk or run it to the top.

Hill climbing really brings you full circle as you actually diminish the rocking and increase the tightness of your turns as the steepness of the hill's grade increases. It becomes almost like a series of rapid punching motions to force the front wheel around in order to gain a few more feet of pavement.

Whatever you do, take your time to graduate to steeper and steeper hills. In the end, the most challenging of hill climbs will be attainable giving you a full body workout rarely found in any other sport…if any at all.

STEP 5: DOWNHILL

Please read the Safety Issue #4 on page 16 of this manual. It best describes our recommendations about riding downhill.

STEP 6: PROPER BRAKING TECHNIQUE

Because the Tribred vehicle has brakes on both rear wheels, it is important to learn how to optimize their effectiveness with some simple rules. First, always apply both brakes together and evenly. Second, dispersing your weight evenly to each rear wheel is crucial for maximum braking effectiveness. If you lift your weight from one foot platform while braking you will cause that wheel to lose traction with the ground. Finally, do not lean on the handlebars while braking.

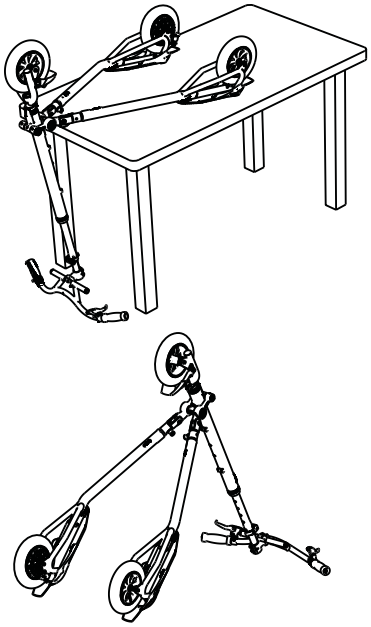
STEP 7: ADDING UPPER BODY POWER

Once you get up to speed with normal riding technique you can move into a more advanced practice of twisting your upper body and thrusting the vehicle into each lean with your arms and shoulders. Essentially, you are throwing your upper body weight in the direction of your turn in order to gain more speed. This technique is especially useful when accelerating or hill climbing, and it definitely comes after learning the basics of riding a carving vehicle. The whole learning process will be a gradual development of our skills with each time that you ride, but the beauty of it is that you will always learn something new with each ride. Enjoy your new carving vehicle.

MAINTENANCE

- Timelly inspect the vehicle for any damage, signs of excessive wear and pay attention to abnormal behavior or noise.
- All bolts and nuts must be checked from time to time to make sure they are properly tight to ensure safety.
- Do not leave the vehicle out in the weather. Store in a dry place.
- Keep the vehicle clean of dirt and sand.
- Avoid salty water. If your Trikke CV gets salty, rinse with fresh water and dry.
- The wheels and steering uses sealed bearings which were properly lubricated at the factory and are maintenance free. Do not try to disassemble or repair. A part must be replaced if it shows restriction of movement or noise. Keep the bearings clean of sand, dirt and moisture.
- Machine oil can be used to lubricate the moving parts of the cambering joint. Marine grease will be preferable if parts are disassemble for cleaning and lubrication.

Suggested positions to perform maintenance.



Tires

- **TIRE PRESSURE SHOULD BE BETWEEN 70-80 PSI IN THE FRONT AND REAR WHEELS.**
- Periodically check tires for wear and/or faults.

Tire Replacement

1. Remove the wheel from the front or rear fork.
2. It is recommended to use a nylon tire tool lever to remove the tire from the wheel. The nylon tool will avoid damaging the wheel rim and tire.
3. Use soapy water to help the tire removal and tire assembly process.
4. When replacing the tube, be sure to insert the valve stem so that it will stick out to the oposite side of the disc of the vehicle when the wheel is assembled.

Brakes

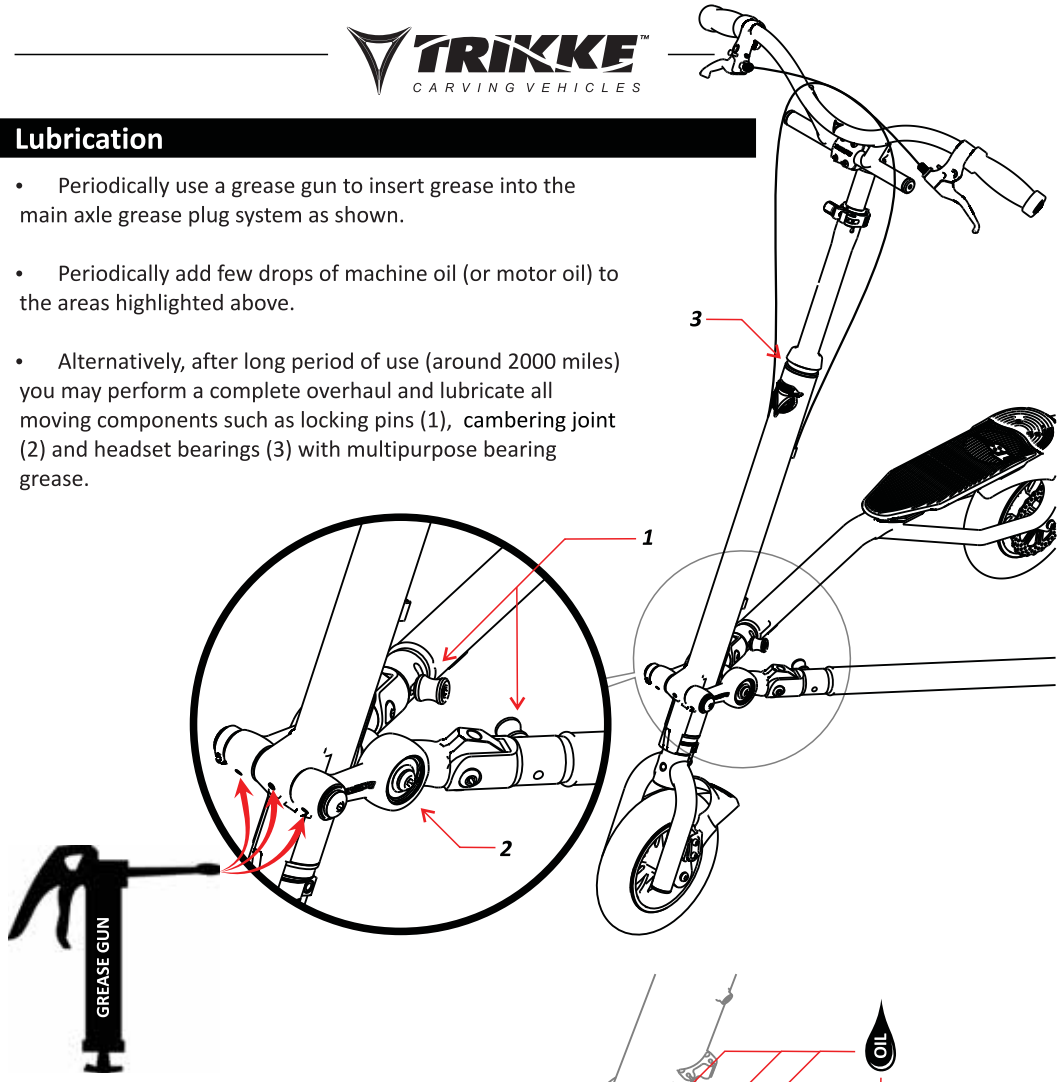
- Visually inspect brakes lines for kinks, routing and integrity. Brakes will need adjust from time to time. Refer to brake adjustment (page 12).
- Keep disc clean of dirt and oil. If pads get contaminated by oil, it may loose its brake power or cause squeak noise. If the disc gets out of true, try to straghten it or replace.

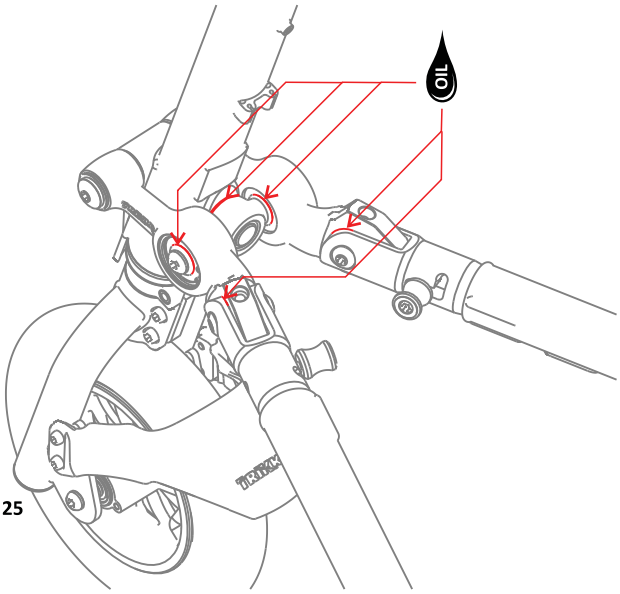
Lubrication

- Periodically use a grease gun to insert grease into the main axle grease plug system as shown.

- Periodically add few drops of machine oil (or motor oil) to the areas highlighted above.

- Alternatively, after long period of use (around 2000 miles) you may perform a complete overhaul and lubricate all moving components such as locking pins (1), cambering joint (2) and headset bearings (3) with multipurpose bearing grease.

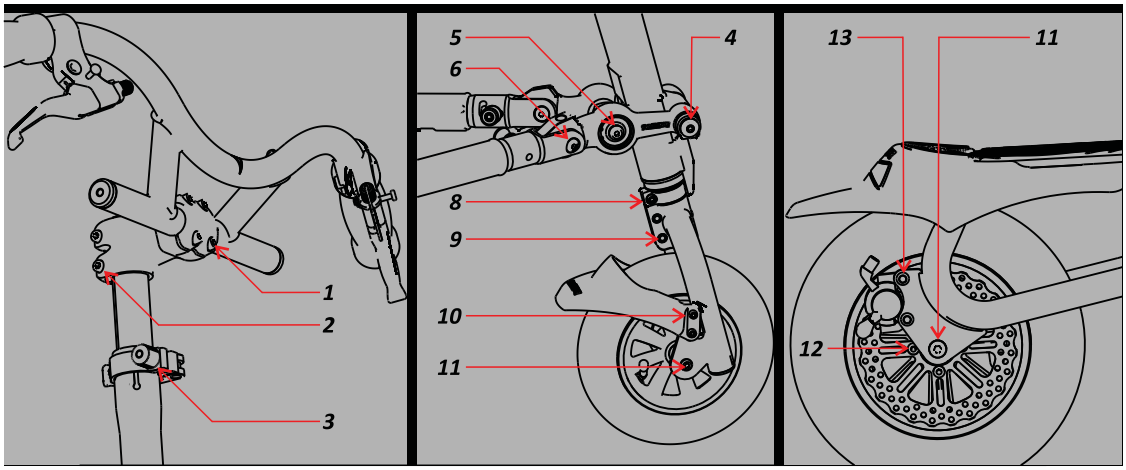




Torque

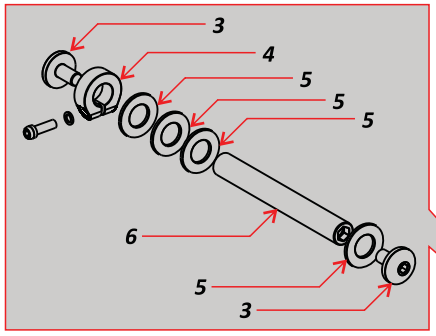
Periodically tighten bolts according to the table below:

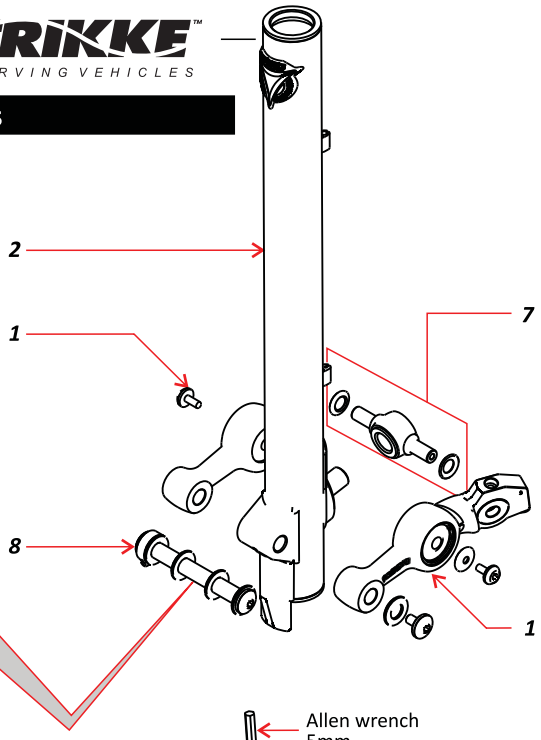
#	Description	Bolt Size	Head	Bolt Class	Thread Material	Torque (Nm)	Thread Lock
1	Stem Plate	M8x24x11	Hex 5mm	9.8 SAE	Steel/Al	9	N/A
2	Stem Clamp	M5x17x8	Hex 4mm	9.8 SAE	Steel/Al	8	Loctite 271 (Red)
3	Quick Release	Quick Release	N/A	9.8 SAE	Steel/Al	Max Hand Tight	N/A
4	Main Axle	Refer page 27					
5	Yoke Ends	M6x15x17	Hex 5mm	9.8 SAE	Steel	13	N/A
6	Folding Axle	M8x15x17	Hex 5mm	9.8 SAE	Steel	15	Loctite 271 (Red)
7	Locking Pin	M6x19x22	Hex 5mm	9.8 SAE	Steel/Al	13	N/A
8	Steering Axle Clamp	M6x20x10	Hex 5mm	9.8 SAE	Steel/Al	11	N/A
9	Fork Clamp	M6x20x10	Hex 5mm	9.8 SAE	Steel/Al	11	N/A
10	Front Fender	M5x12x9.9	Hex 3mm	9.8 SAE	Steel/Al	3	N/A
11	Wheel Axle	M8x15x17	Hex 6mm	9.8 SAE	Steel	13	Loctite 271 (Red)
12	Disc	M5x13x9.8	Hex 5mm	9.8 SAE	Steel/Al	6	Loctite 243 (Blue)
13	Brake Caliper	M5x13x9.8	Hex 5mm	9.8 SAE	Steel/Al	9	Loctite 243 (Blue)



Main Axle Assembly Instructions

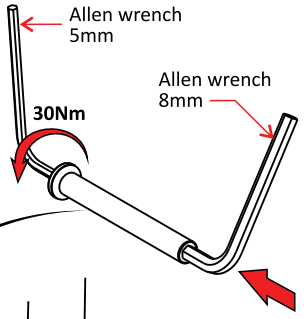
NUMBER	PART NAME
1	ARM EXTENSION
2	FRONT STRUCTURE
3	MAIN AXLE BOLT
4	MAIN AXLE CLAMP
5	MAIN AXLE WASHER
6	MAIN AXLE
7	YOKE
8	MAIN AXLE ASSEMBLY



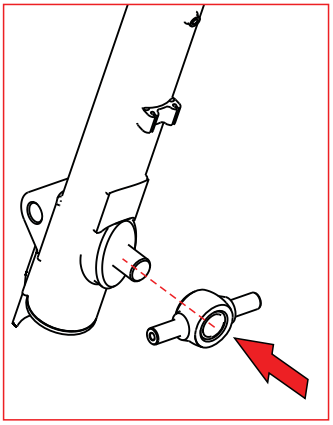


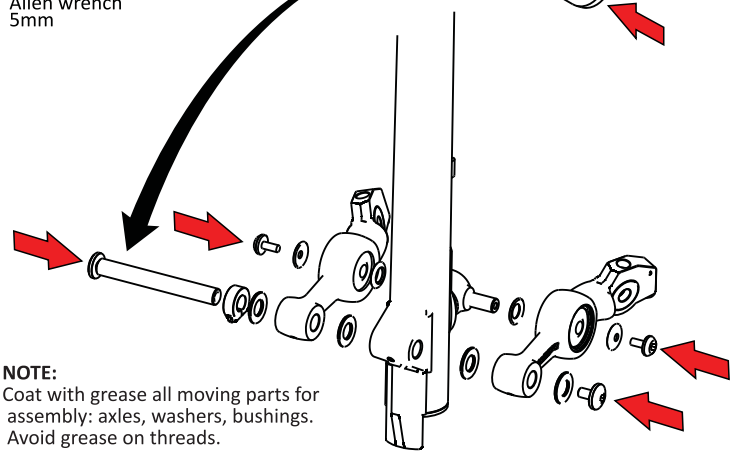
1. Install the first bolt to the main axle. Torque to **30Nm** (265 lb-in). Use a 8 mm tool to hold the main axle in place where the arrow indicates. This torque will lock the bolt in place.

Allen wrench 5mm and allen wrench 8mm

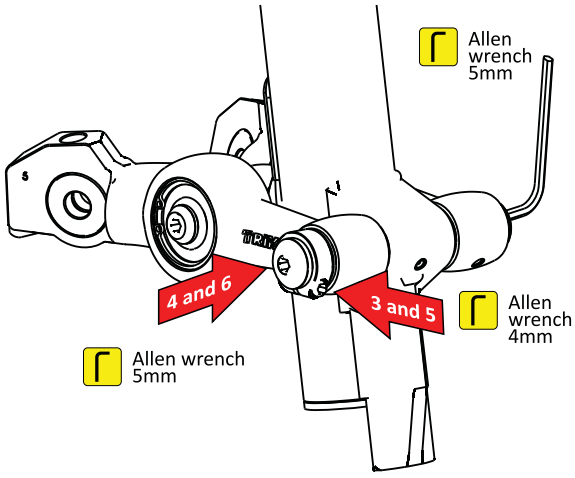


2. Install the main axle assembly and complete the cambering joint assembly. Allen wrench 5mm





NOTE:
Coat with grease all moving parts for assembly: axles, washers, bushings. Avoid grease on threads.



3. Assemble the clamp (part 4) but do not torque the clamp bolt.

4. Assemble the bolt (part 3) and torque lightly to **5 Nm** (44 lb-in) - not final torque.

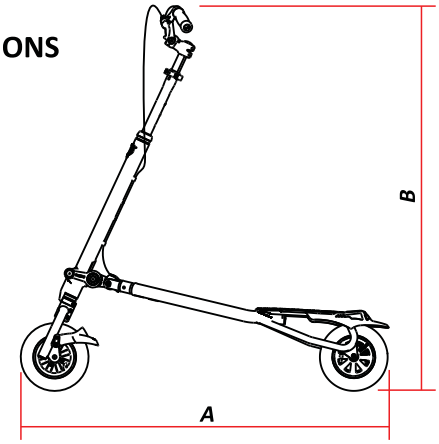
5. Torque the steel clamp bolt (part 4) in the aluminum clamp threads to **8 Nm** (71 lb-in).

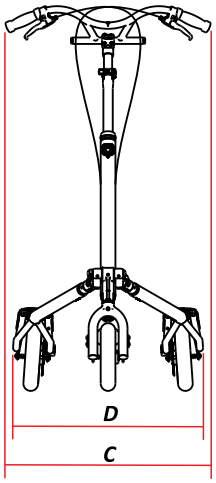
6. Assemble the bolt (part 3) and torque to **15 Nm** (177 lb-in).

TRIKKE T8 or T12 SPECS

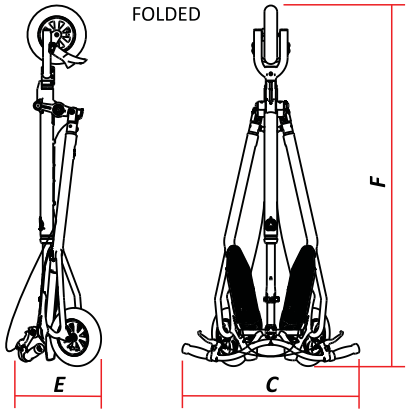
MODEL	T8	T12
RIDER WEIGHT LIMIT	**250 lbs** (114 kg)	
VEHICLE WEIGHT	**27 lbs** (12 kg)	**31 lbs** (14 kg)
FRAME MATERIAL	**Alloy AL6061**	
FINISH	**Painted / Anodized**	
WHEELS	**Aluminum Rim 8.5"**	**Aluminum Rim 12"**
WHEELS BEARING	**Saled Abec 5 608ZZ**	**Saled Abec 5 6000ZZ**
TIRE	**8.5 x 2" High Pressure**	**12 1/2 x 2 1/4" High Pressure**
BRAKE SYSTEM	**Cable, Caliper and Disc**	

BASIC DIMENSIONS





MODEL	T8	T12
A	***49in*** *(125cm)*	***56.8in*** *(144cm)*
B	***50 - 54.4in*** *(127 - 138cm)*	***53.3 - 57.6in*** *(135 - 146cm)*
C	***27.4in*** *(70cm)*	***28in*** *(71cm)*
D	***25.4in*** *(65cm)*	***27.6in*** *(70cm)*
E	***12.8in*** *(32cm)*	***19.3in*** *(49cm)*
F	***55.8in*** *(142cm)*	***65in*** *(165cm)*



TRIKKE™
CARVING VEHICLES

FIND OTHER PRODUCTS BY TRIKKE AT trikke.com

skki

SNOW SKI CARVING VEHICLES

No boots - no bindings! The rider just leans the Trikke SKKI and the three skis carve the turns. It is much easier to learn than skiing or snowboarding and beginners always have fun on the first run. One unit can be shared by riders of all different ages, skill levels, and sizes. Feel the control of skiing with handlebars. Feel the freedom of riding without bindings.

tribred

Electric Commuter Carving Vehicle

The new electric Tribred Pon-e is the “game changer” for Trikke. With a motorized front wheel and dual rear brakes, the Tribred reaches speeds of 17 mph and travels up to 28 miles per charge – depending on speed setting and model being ridden.”. Supplement that with the ability to add human power and the Tribred becomes a socially responsible hybrid commuter vehicle with excellent mileage - 3 miles per penny!

TRIKKE ACCESSORIES

Trikke offers the following accessories, check out at **www.trikke.com.**

Protective Gear

Helmet, gloves, knee and elbow pads.

Trikke Apparel

Shirts, caps, etc.

Hydration Pack

Essential for hot days or long distance carving.

REPLACEMENT PARTS:

To order replacement parts please, contact our sales department at **1-877-4TRIKKE**. You can also visit our website at **www.trikke.com.**

TRIKKE LIMITED WARRANTY

Subject to the following limitations, terms and conditions, Trikke Tech, Inc. (“Company”) warrants to the original owner of each new Trikke cambering vehicle (“Vehicle”) that the Vehicle when new is free of defective materials and workmanship. This warranty shall expire twelve months from the date of the original purchase from Company or an authorized dealer or representative. This warranty is conditioned upon the Vehicle being operated under normal conditions and use, and properly maintained. This warranty is void if the Vehicle was not purchased new or not properly assembled. Make sure to send in your Owner Registration Card to Trikke Tech by mail or log on to **www.trikke.com/registration** and register online.

If the Vehicle frame should break due to faulty materials or workmanship during the warranty period, the Vehicle will be replaced subject to the Conditions of Warranty below. If any part of the Vehicle fails to function properly due to faulty materials or workmanship during the warranty period, such part will be repaired or replaced, at Company’s discretion, subject to the Conditions of Warranty below.

CONDITIONS OF WARRANTY

This Limited Warranty is made only to the original owner of the new Vehicle purchased from Company or an authorized dealer or representative, and it shall remain in force only as long as the original owner retains ownership of the Vehicle. This Limited Warranty is not transferable.

In order to exercise your rights under this limited warranty, the warranty claim must be presented during the warranty period to Company or one of its authorized representatives, together with a receipt, bill of sale or other appropriate written proof of purchase. The original owner shall pay all delivery or shipping charges connected with delivery or shipment of the defective frame or part to Company or its authorized dealer. Under no circumstances does this limited warranty include the cost of travel, delivery or shipment to Company or its authorized dealer. Such costs, if any, shall be borne by the original owner. Company shall pay the shipping costs associated with shipment of a replacement Vehicle and/or the shipment of a replacement or repaired part to the original owner. The original owner shall be responsible for any re-assembly of the Vehicle required in connection with any replacement or repair.

It is the responsibility of the original owner to ensure that all parts included in the factory-sealed carton are properly installed and that all functional parts are adjusted properly. It is also the responsibility of the original owner to perform or provide all reasonable and necessary maintenance and adjustments to keep the Vehicle in good working condition.

This limited warranty does not apply to normal wear and tear, nor to claimed defects, malfunctions or failures that result from abuse, neglect, shipping damage, damage caused accidentally or deliberately, exceeding weight limits, improper assembly, improper maintenance, alteration, collision, crash or misuse or improper use. The Vehicle has not been designed, engineered, distributed, manufactured, or retailed for uses in trick riding, ramp riding, jumping, aggressive riding, riding on severe terrain, riding in severe climates, riding with heavy loads, commercial activities, or any similar activities; such uses may damage the Vehicle, can cause serious injury to the rider, and in all cases will void this warranty. The user assumes all risk of personal injuries relating to use of the Vehicle, damage to or failure of the Vehicle and any such injury, damage or loss if the Vehicle is altered in any way or if it is used for stunt-riding, ramp jumping, or similar activities.

USEFUL PRODUCT LIFE CYCLE

Every Trikke cambering vehicle has a useful product life cycle. The length of that useful product life cycle will vary with the maintenance and care received over its useful product life, and the type and amount of use the Trikke cambering vehicle is subject to. The Trikke cambering vehicle should be checked periodically for indicators of stress and any other indicators of potential problems. These are important safety checks and very important to help prevent accidents, bodily injury to the rider and shortened useful product life cycle of the vehicle.

THIS IS AN INTEGRATED AND FINAL STATEMENT OF TRIKKE'S LIMITED WARRANTY. COMPANY DOES NOT AUTHORIZE OR ALLOW FOR ANYONE, INCLUDING ITS AUTHORIZED DEALERS OR REPRESENTATIVES, TO EXTEND ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. NO OTHER REPRESENTATION AND NO STATEMENT OF ANYONE BUT THE COMPANY, INCLUDING A DEMONSTRATION OF ANY KIND BY ANYONE, SHALL CREATE ANY WARRANTY REGARDING THE TRIKKE CAMBERING VEHICLE. ALL OF THE REMEDIES AVAILABLE TO THE ORIGINAL OWNER ARE STATED HEREIN.

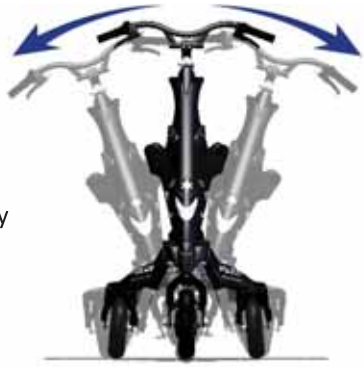
IT IS AGREED THAT TRIKKE TECH, INC.'S LIABILITY UNDER THIS LIMITED WARRANTY SHALL BE NO GREATER THAN THE AMOUNT OF THE ORIGINAL PURCHASE PRICE AND IN NO EVENT SHALL TRIKKE TECH, INC. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

DISCLAIMER

All other remedies, obligations, liabilities, rights, warranties, express or implied, arising from law or otherwise, including but not limited to, any claimed implied warranty of merchantability, any claimed implied warranty arising from course of performance, course of dealing or usage of trade, and any claimed implied warranty of fitness, are disclaimed by Company and waived by the original owner.

Some states, jurisdictions, countries, do not allow some or all of the limitations set for herein, or the exclusion or limitation of incidental or consequential damages. If any provision is found unenforceable, only that provision shall be stricken and all others shall apply. This limited warranty does provide the original owner with certain legal rights and recourse and the original owner may possess other rights or recourse, depending on the state, jurisdiction, country or province.

The exclusive 3CV™ technology developed by Trikke Tech is the mechanism that makes this forward propulsion possible. The unique cambering mechanism is elegantly simple yet provides the necessary rigidity, geometry and resistance to the rider's motion to allow for optimum control, speed, comfort, durability and especially rider confidence. You are now the owner of the original Tribred .



Patent & Trademark Information

The Trikke carving vehicle and mechanisms are protected by Trikke Tech, Inc.'s Patents: US 6,220,612; 6,499,751; 6,827,358; 6,976,687; Europe 1235709; Canada 2,390,224; China ZL 00 8 18040.7 - Additional U.S., European and other International Patents are pending.

TRIKKE is trademark of Trikke Tech, Inc.

Contact Information

Most inquiries can be addressed at our website www.trikke.com. There you will find assembly, riding, and maintenance information as well as product information, accessories, videos, photos and more. If you don't find the replacement part on our website, please contact Trikke Tech via e-mail at tech@trikke.com.

Trikke Tech, Inc.
85 Industrial Way - suite F
Buellton, California USA 93427
Phone: 805-693-0800

International inquiries:

The **www.trikke.com** home page has links to all of our international websites for contact information in your country.

⚠ WARNING ⚠

CAUTION: RIDE AT YOUR OWN RISK. RIDING THIS VEHICLE MAY RESULT IN SERIOUS INJURY OR DEATH.

- Read and understand the assembly, maintenance & safety sections of the owner´s manual.
- Always follow instructions and pay attention to all warnings in the manual.
- Do not lean back or pull back on the handlebars.
- Always wear proper safety equipment such as a helmet, elbow pads and knee pads.
- Children should always be supervised by an adult. Not recommended for children 13 years and under.
- Always inspect the vehicle before each ride and assure proper brake function. Always apply both brakes evenly.
- Do not lean your body weight on the handlebars.
- Do not turn the handlebars more than 180^{0} to prevent brake cable from wrapping around column.
- Do not ride on wet surfaces or at night.
- Rider weight not to exceed 250 lbs. or 114 kg.