



tressel_{FOLD²}

USER MANUAL

Welcome to the tressel family!

We know you have lots of options in today's market, and we are truly grateful and excited that you selected our product and joined our family. Your new **tresselFOLD²** has been meticulously designed and built to provide many years of safe and enjoyable travel around town and wherever life takes you.

This manual contains important information regarding the operation of your new **tresselFOLD²**. Please take time to read this manual carefully to ensure that you, and everyone around you, stays safe. Your safety and satisfaction are everything to us so please contact us immediately if you ever have any concerns about your **tresselFOLD²**. Remember, you are now part of the family and we take that very seriously.

Before riding your **tresselFOLD²** be sure to research and review the local laws and regulations in your area that govern the use of such devices. For example, some areas:

- require light systems to be installed or carried with you.
- restrict riding to certain ages and specific areas.
- restrict children from riding on public roads.
- require helmets while riding.

The **tresselFOLD²** is a single or two-person electric trike that offers unmatched portability and ability to move freely. It is practical, reliable, efficient, and environmentally friendly. Using a state-of-the-art lithium-ion battery, the **tresselFOLD²** has an adjustable speed of 5 to 15 miles per hour and a range of 30 to 50 miles depending on the speed and weight of the rider(s). We are confident that you will find the **tresselFOLD²** to be the ultimately way to move freely each and every day.

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tresselFOLD²

14. 3 Speed Throttle
15. Brake Lever
16. Headlight
17. Folding Basket
18. Support Bracket
19. Floorboard



1. 350W Motor (2)
2. Floorboard
3. Fold-Lock Mechanism
4. Front Bottom Seat
5. Rear Bottom Seat
6. Bottom Back Seat
7. Top Back Seat
8. Adjustable Armrests
9. Rear Folding Bag
10. Recliner Lever
11. Axel Bolt Covers
12. Reflector
13. Mud Guard

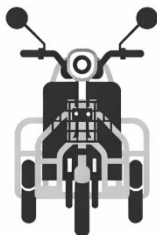
KEY FEATURES

1. Folding frame for compact storage and easy transportation.
2. Carbon steel frame, load-bearing tube frame body structure.
3. Front and rear hub brakes.
4. The backseat folds down with a recliner lever to provide additional space for the passenger or for additional storage.
5. Front folding basket with option support bracket.
6. Rear store bag with expansion capability.
7. Lifting points when folded for an easy two-person lift.
8. Adjustable armrests
9. Motion detection alarm
10. 3-Speed throttle (5mph/10mph/15mph)
11. Forward and Reverse
12. Running lights
13. Brake lights
14. Turn Signals
15. Horn
16. Dual-electric 350W motors (700W total)
17. Headlight with charge level indicator
18. Charging port on rear for hassle-free charging.

ATTENTION: USE CAUTION. FAILURE TO USE COMMON SENSE AND HEED THE BELOW WARNINGS FURTHER INCREASES RISK OF SERIOUS INJURY. USE AT YOUR OWN RISK AND WITH APPROPRIATE AND SERIOUS ATTENTION TO SAFE OPERATION.

GETTING STARTED

1. Before use, please read the instruction manual carefully to understand the performance of the vehicle.
2. If subject to any health concerns that could affect your ability to drive the Tressel FOLD, speak to a professional before purchasing a Tressel FOLD. Please reach out to your physician for an assessment to make sure you are a good fit to safely ride the Tressel FOLD.
3. If you wear glasses or contacts, be sure to wear them whenever using the Tressel FOLD.
4. Do not drink any alcohol before operating the Tressel FOLD.
5. Do not take any medication that may impair (drowsiness, impaired vision) your ability to operate the Tressel FOLD.
6. Do not allow children to drive the Tressel FOLD.
7. Do not lend it to someone who is unfamiliar with operating it.
8. Unauthorized disassembly may pose safety hazards and lead to danger.
9. Do not drive on motorways, highways, or freeways.
10. Please abide by traffic rules and ride within areas permitted by national traffic regulations. Refer to your local ordinances.
11. Before riding, ensure that the seat, frame, handlebars, and wheels' fasteners are securely tightened to avoid accidents.
12. The product should only be repaired in accordance with the manufacturer's specifications & direct recommendation. Making any modifications or breaking the seal under the seat (without Tressel's direction) will void the user's warranty.
13. Only use the manufacturer's authorized replacement parts, and do not make any modifications to the manufacturer's original design and configuration.
14. If you are using a TRESSEL for the first time, or if it has been a while since you have driven on the road, we strongly advise you to go on a training course.
15. Make sure that you are familiar with all the controls on your TRESSEL before you go out.
16. To best enjoy your TRESSEL plan your journey. The most direct or the shortest route will not always be the best route to take. Steep hills, high curbs or other obstructions may make it impossible to tackle certain routes. Do not put yourself into dangerous or risky situations by overstretching your capabilities or the TRESSEL's capabilities.



ACCEPTABLE DRIVING PRACTICES

1. Always check and obey any local laws or regulations, which may affect the locations where the Tressel FOLD may be used.
2. Always keep safely away from cars and motor vehicle traffic, and only drive where allowed and with caution.
3. If you are not familiar with how to drive the Tressel FOLD, please contact Tressel. A representative will drive out to you and give a safety & operating demonstration/training at no cost to you.
4. Do not activate the speed control on the hand grip unless you are seated on the Tressel FOLD and in a safe environment suitable for driving.
5. Avoid excessive speeds that can be associated with downhill rides.
6. Always maintain a hold on the handlebars.
7. Do not touch the front wheel or rear motor(s) on your product when in use.
8. Make sure to slow down turning any turns when on the Tressel FOLD. Do not accelerate into a turn or take a turn without slowing down appropriately.
9. Be careful of curbs. Always slow down and avoid taking the curb at an angle.
10. Always use pedestrian crossings when available.
11. Be mindful of your terrain, the Tressel FOLD is not meant for off-roading. The dual motor allows for consistent power through grass, dirt, and pavement.
12. Always inspect the Tressel FOLD before and after each use.
13. If carrying things on the reclined backrest:
 - a. Make sure the load is secured and strapped if necessary.
 - b. Do not overload the backrest past 20lbs.
14. Do not hang anything on the handlebars.
 - a. This can cause damage to the instruments.
 - b. This will cause the driver to lose control when in use if bags or other items are hanging from handlebars.



OPERATING THE TRESSEL FOLD

**** The top speed of the TRESSEL FOLD is 15mph. This will vary depending on the speed selected, and can be affected by conditions, such as rider weight, gradient, tire inflation and battery charge level.**

1. Ensure the battery is charged and plugged in before use.
2. Insert the key into the headlight and turn it forward once to turn on the Tressel FOLD.
 - a. The battery indicator will light up showing the status of the battery, speed, and lights.
 - b. Turn the key forward one more click to turn on the front headlight and rear running lights.
3. The Tressel FOLD has forward (D) and reverse (R). Located right above the speed controller.
4. The Speed controller is on the right-hand side, below the drive & reverse selector switch. See below image.
 - a. There are three (1,2,3) speed options for the Tressel FOLD. **
 - i. Speed 1 = **5mph**
 - ii. Speed 2 = **10mph**
 - iii. Speed 3 = **15mph**
5. Turn signals are on located on the left side of the handlebars, right above the Horn.



6. The left brake lever is for both rear hub brake(s), the right is for the front.

- a. Both rear brakes can be locked when parked to avoid rolling when not in use.

- b. On the left brake lever, pull the brake lever and press in the top button, then release the brake lever while still holding the button and it will catch, locking the lever in place and both rear brakes. Repeat on the right side to engage the front brakes.



- c. The brake lights will always light up when either the left or right brake lever is used. Using the brakes will shut off the motor, so it is always good to lock them whenever getting on and off the Tressel FOLD.



- d. The rear brakes can be adjusted by the bolt on the brake cable behind each rear wheel.

7. Recliner & Armrests

- a. Simply hold the back seat and pull the recliner lever to recline the back seat. Reverse this process to return the seat to its original position
- b. The rear armrests fold up for extra space. The rear back seat folds down to a maximum of 180 degrees, allowing for more room for the rider or light storage while driving alone.



8. The rear battery gate is keyed, the (2) keys are attached to the Tressel FOLD's key ring.



9. Wireless Key FOBs & Alarm System - (2) Key Fobs & (2) Mechanical Key

a. Wireless Motion Activated Alarm

- a.
- b. Press the **(top)** lock button to turn **ON** the motion activated alarm system. You will be notified when it is activated with (1) audio beep.
- c. Press the **(middle)** Unlock button to turn **OFF** the motion activated alarm system. You will be notified when it is activated with (2) audio beep.



b. Using Keyless Start

- i. To turn **ON** the Tressel FOLD2 using the keyless start, press the **(bottom)** lightning bolt button 2 times.
- ii. To turn **OFF**, press the **(middle)** unlock button.

****The alarm is motion activated, therefore if the Tressel FOLD is moved at all then the alarm will go off until shut off with the key.****

PRE-DRIVE CHECKLIST

1. Before use, check to confirm that all bolts, wires, or brake cables are in place and in safe operating condition.
2. Check that the brake is functioning properly.
3. Check that the tires are inflated properly (40 psi) and have sufficient tread remaining.
4. Ensure the stem is secured in place, and ensure axle bolts are tightend.
Use 6mm hex key & 16MM (Front) 21MM (Rear).
5. Verify brakes are tight, tighten each respective side if the lever has little resistance. Low resistance means the brakes are not going to be as responsive, leading to a longer stopping distance.

6. Tighten mirrors.
7. Tighten foldable pegs to the desired location.
8. Lock safety brake and get on your Tressel FOLD.
 - a. If riding solo, set up backseat.
 - b. If riding duo, allow the rear passenger to be seated first.
9. Put the key in the ignition and turn the Tressel FOLD on. (There will be no sound)
 - a. 1 turn click to turn it on.
 - b. 2 turn clicks to turn on front headlight and rear running lights.
10. Place both hands on the handlebar grips, feathering the left hand over the brake lever.
 - a. Always be prepared to stop.
 - b. The motors are disabled when the brakes are in use.
11. Select the desired direction.
 - a. D = Forward
 - b. R = Reverse (Alarm will sound)
12. Release the safety brake.
 - a. The Tressel FOLD will not move if the safety brake is engaged.
 - i. The safety brake disables both motors.
13. Make sure you are in a safe environment and **SLOWLY** turn the right grip (counterclockwise) downwards to start moving forward. There will be a slight delay when first accelerating.
14. **DO NOT LEAN WHEN TURNING.** The Tressel FOLD is a three (3) wheel trike that can become unstable and roll during high-speed cornering. Leaning into turns exacerbates this.
15. Do not ride the Tressel FOLD in the rain or snow.

16. Drive at low speeds whenever possible. In case of emergency braking during high-speed riding, use both front and rear brakes simultaneously and maintain control of the direction.
17. Avoid riding on uneven, muddy, gravel, or stair roads to prevent punctures, deformation of the wheels, damage to the vehicle, and potential danger to the rider(s).
18. Do not lubricate the braking parts to prevent brake failure and potential danger.
19. When finished driving:
 - a. Stop driving.
 - b. Turn off the Tressel FOLD
 - c. Lock safety brake.
 - d. Step off the Tressel fold.



RIDE DEFENSIVELY

Do not attempt or do stunts or tricks on your Tressel FOLD. It is not made to withstand abuse from misuse, such as jumping, curb grinding or any other type of stunts. Racing, stunt riding, or other maneuvers also enhance the risk of loss of control or may cause uncontrolled rider actions or reactions. Do not ride your electric product in wet or icy weather and never immerse the product in water, as the electrical and components could be damaged by water or create other possibly unsafe conditions. In rainy or snowy weather, maintain distance due to increased braking distance. Slow down when turning to avoid tipping over.

1. Watch out for potential obstacles that could catch your wheel or force you to swerve suddenly or lose control.
2. Be careful to avoid pedestrians, skaters, skateboards, scooters, bikes, children, or animals who may enter your path, and respect the rights and property of others.
3. The electric product is intended for use on flat, dry surfaces, such as pavement or level ground, without loose debris, such as sand, leaves, rocks, or gravel. Wet, slick, bumpy, uneven, or rough surfaces may impair traction and contribute to possible accidents.
4. Do not ride your electric product in mud, ice, puddles, or water.
5. Watch out for potential obstacles that could catch your wheel or force you to swerve suddenly or lose control.
6. Avoid sharp bumps, drainage grates, and sudden surface changes.
7. If required to drive at night, always turn on the lights.

CHANGING SEAT POSITIONS

1. The Tressel FOLD offers a backseat for those who want back support when driving solo.
2. Simply lift the bottom rear seat, slot the bar on the back of the seat into the latch and ensure it is secure. Reverse this process to return it to the dual passenger set up.
3. To return into the two-seater position, simply pull the bottom rear seat forward, move the bar back into its former position, and put the seat back down. If the seat won't go correctly into the flat position, check for wires or anything blocking its path.
4. The back of the seat may be leaning forward, preventing the seat from falling into its correct placement.



FOLDING & STORAGE

1. Ensure the Tressel FOLD is turned off.
2. Step off and unlock the front brakes.
3. Be sure that the bottom rear seat is folded in the down position.
4. Pull the pin under the seat with one hand and lift the front of the seat with the other, simultaneously.
5. As you continue pulling the seat up, step behind the Tressel FOLD, and pull it back the rest of the way.
6. When folded, leave a gap between the seats with the recliner lever. Prevents the seat cushioning from being compressed.
7. Unlock the left brake safety lever to roll the Tressel FOLD like a hand truck or dolly.
8. Once left in its desired location, lock the safety brake to ensure it doesn't move.



FOLDING BASKET

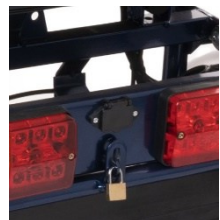
The front basket folds for compact storage. Be careful when opening, as it is spring loaded and will open quickly when unlatched.

1. To open the front basket:
 - a. On the front of the Tressel FOLD
 - b. Unlatch the clasp in the top-middle of the basket. Compressing the basket makes this easier.
2. BE CAREFUL! The basket is spring loaded and will open quickly.
3. Support bracket for front folding basket (25lb max load)
 - a. There is a support bracket behind the front folding basket.
 - b. Simply unscrew the bracket and reinstall with the basket open.
 - c. Use the installed basket hardware to secure the bracket under the basket.



CHARGING THE BATTERY

1. Plug the cord into the power block, then into the wall. Then plug the matching green into the Tressel fold. A red light will appear when charged. The light will turn green once fully and remove when complete. Keep charge level between 2 and 4 bars to maintain the life of lithium-ion battery. See below for more information on lithium-ion batteries.
2. Do not plug the Tressel FOLD directly into the wall without the power brick connected.
3. The charger supplied with the electric product should be regularly examined for damage to the cord, plug, or enclosure. In the event of such damage, the product must not be charged until the charger has been repaired or replaced.



4. Do not leave the charger plugged into the wall or the Tressel FOLD if not actively charging.
5. Do not operate charger near flammable materials. Always disconnect from the charger prior to wiping down and cleaning your electric product with damp cloth.
6. Charge the battery in a well-ventilated environment, avoiding rainwater, dew, and direct sunlight.
7. Protect the battery in freezing temperatures and never charge a frozen battery, as it may damage the battery and cause personal injury.
8. Prevent the battery from encountering water. This will cause short-circuiting between the positive and negative terminals and avoid working under high temperatures (above 45 degrees Celsius).
9. Only use the provided charger.

IMPORTANT INFORMATION REGARDING THE LITHIUM MANGANESE IRON PHOSPHATE (LMFP) BATTERY.

High-Energy Density:

LMFP are cutting edge batteries that have higher energy density than other battery types, so they can store more energy.

Long Cycle Life:

LMFP batteries can be recharged and discharged thousands of times (on average) before they lose capacity.

Fast Charging:

Unlike other battery types, lithium-ion batteries are charged relatively quickly.

CHARGERS

- ✓ All chargers are not created equal. The Tressel FOLD comes with a 20AH charger with auto shut off, specifically designed for the 48V Lithium-ion battery power supply. Do not use any other charger, unless directed by Tressel.

BATTERY CARE

- ✓ LMFP batteries can be charged hundreds of times, but they last longest when they are not deeply discharged. Ideally, the battery should be operated between 50 and 90 percent.
- ✓ Did you know? Li-ion batteries age even when not being used, however they age much faster when it's hot, so avoid leaving your Tressel FOLD in the heat for extended periods of time.

PARAMETER TABLE

Specification	Parameters	Specification	Parameters
Unfolded size: L x W x H (inches)	55x30x39	Folded size: LxWxH (inches)	29.5x21.6x42.5
Vehicle Weight	165lbs	Battery Capacity	48V/ 20AH
Motor Power (Dual motor)	48V 350W (700W Total)	Driving Speeds (Subject to charge)	3 Speeds: 5mph/10mph/15mph
Mileage*	30-50 Miles	Drive Mode	Forward & Reverse
Maximum Weight Capacity	500lbs	Tire Size (inches) & Tire Pressure	14x2.125 40 PSI
Braking Method (Front & Rear)	Hub Brake	Maximum Speed	15 mph

***"Mileage" refers to the mileage driven at the highest speed with a single start (the weight of the rider is 75KG, the temperature is from 10 degrees to 30 degrees Celsius, the wind speed is not more than 3m/s, and there is no rain or snow, and the road surface is flat asphalt or concrete). With long battery life and insufficient tire pressure will affect the total range.

TROUBLESHOOTING GUIDE

Failure	Reason For Failure	Potential Solutions
No or slow acceleration, malfunction, low top speed, motor does not work.	Low battery voltage The electromagnetic brake handle is not closed. Accelerated handle wire detachment Stuck or failed accelerator handle spring	Fully charge the battery Close the electromagnetic brake lever. Clean or swap accelerator grips
Insufficient mileage after one charge.	Insufficient charge or charger failure Aging or damaged batteries	Fully charge the battery Charger replacement Battery replacement

Charger stopped charging.	Charger failure Loose battery connection cable or poor contact with charging cable charging cradle, blown fuse	Replacement of the charger Checking the lines
No battery indicator	Battery cable disconnected Low Voltage Disconnected power meter cable or Malfunction	Check wiring & battery charge level. Part replacement
Power outage while driving	The controller has a auto shut off function if under too much stress. Battery connecting wire disconnected or poor contact of power cord	Power off and on Check the wiring. Check Battery
Rattling while driving	Loose screw Motor bearing wear	Fastening screw Replacement of bearings

WARRANTY

ONE YEAR FENDER-TO-FENDER GUARANTEE

In the event that there are any failures at all within the first year (at no fault of the owner), Contact Tressel and we will come out to service, replace, or repair at no cost to the purchaser. If the item cannot be repaired, then Tressel will swap it with a brand new unit.

1. Malfunctions caused by the user's failure to use, warranty and adjustment in accordance with the provisions of the "User's Manual".
2. The user's own modification, dismantling and or repair. Tampering with the vehicle will affect the original state of the fault damage, causing it difficult to carry out any technical identification and analysis of the failure.
3. Failure caused by improper use or storage by the user.
4. Wear & tear parts are not under "warranty", such as: brake lines, brake blocks, and tires (inner and outer tires).
5. Tampering with the controller housing, battery, or connections on their own without the consent of Tressel will result in a voided warranty.

5 YEAR BATTERY GUARANTEE

1. We will replace the battery within 5 years if any mechanical issues arise.
2. Warranty does not cover physical damage, water damage, or low voltage after 1 year.
 - a. Low voltage failures would occur early if faulty, failure after the one year period indicates poor charging maintenance. **Charge once a month to maintain a healthy and happy battery.**

****CRITICAL NOTE: CHARGE BATTERY ONCE A MONTH TO PREVENT DISCHARGING. IF LEFT WITHOUT CHARGING FOR 2+ MONTHS, BATTERY WILL START TO DEGRADE AND LOSE CAPACITY. ***

Special Note: The warranty above is based on whether the quality is the root problem and functional failure, not caused by misuse or vandalism.

WARRANTY TABLE

NO.	Parts Description	Warranty	Problem description
1	Motor	1 Year	Replace the motor with a new one within one year, and repair the motor within two years (the motor coil is out of phase, short-circuited, burned out, not caused by maloperation or power failure)
2	Throttle, Turn Signal/Taillight, Horn, Brake Lever(s), Headlight	1 Year	Functional failure
3	Controller	1 Year	Functional failure
4	Charger	1 Year	Functional failure
5	Lithium-ion Battery	1 Year	Replace with new battery within the first year, if battery capacity was less than 90% after fully charged
5	Handlebar, Frame, Front Fork, Steering Column, Rear Flat Fork	1 Year	Functional failure

PARTICIPANT AGREEMENT, RELEASE AND ASSUMPTION OF RISK

In consideration of the services of Tressel LLC, their agents, owners, officers, volunteers, employees, and all other persons or entities acting in any capacity on their behalf (hereinafter collectively referred to as "TRESSEL LLC"), I hereby agree to release, indemnify, and discharge BLN, on behalf of myself, my spouse, my children, my parents, my heirs, assigns, personal representative, and estate as follows:

By signing this document, I acknowledge that if anyone is hurt or property is damaged during my use of the Tressel FOLD, I may be found by a court of law to have waived my right to maintain a lawsuit against TRESSEL LLC on the basis of any claim from which I have released them herein. I also agree that this document is valid for subsequent visits and participation at TRESSEL LLC. I have had sufficient opportunity to read this entire document. I have read and understood it, and I agree to be bound by its terms.

Date: _____ **Signature:** _____