

# TRANSFORMER Scooter



## User Manual

March 2018



Thank you for choosing the TRANSFORMER Folding Scooter. Please read this manual carefully before operating the TRANSFORMER. If you have any questions or need further assistance, please contact your TRANSFORMER Dealer or Enhance Mobility directly at 800-296-4151 option 2 or [service@enhancemobility.com](mailto:service@enhancemobility.com).

This manual covers the TRANSFORMER's characteristics, components, functions, safety guidelines, battery, and maintenance.



The following symbol is used in this manual to indicate warning. It is extremely important you fully understand the content. Failure to note the warnings may cause personal injury and/or damage the scooter.

Please note all information and photos in this manual are for reference only and are subject to factory changes and modifications.

Before using your TRANSFORMER Scooter please be sure that the delivery is complete. Your TRANSFORMER package should include the owner manual, battery, key (2), remote control, battery charger, removable arm rests, 2 arm screws and 2 allen wrenches (5mm & 4mm). If you did not receive a complete delivery, contact your authorized TRANSFORMER dealer. If damage has occurred to the packaging or contents during transport, contact the delivery company immediately.

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Children should not operate the TRANSFORMER Electric Scooter. People with health concerns should consult a physician before use.

# 1. TRANSFORMER Feature Guide

The TRANSFORMER is composed of the following parts: front and rear frame, handlebar controls, rear wheels, front wheels, bumper, tiller, tiller lock lever, tiller tilt adjuster, foldable seat, seat supporting frame, deck, battery, charger port, armrests and remote bi-pass switch.



- |                             |                              |                  |
|-----------------------------|------------------------------|------------------|
| 1. Control Panel            | 11. Rear Wheel               | 22. Charger Port |
| 2. Steering Handle          | 12. Anti-Tip Wheel           |                  |
| 3. Directional Controls     | 13. Rear Deck/Housing        |                  |
| 4. Telescoping Tiller       | 14. Arm Screws               |                  |
| 5. Tiller Lock Lever        | 15. Armrests                 |                  |
| 6. Manual Release<br>Lever  | 16. Backrest                 |                  |
| 7. Front Housing/<br>Bumper | 17. Seat Cushion             |                  |
| 8. Battery                  | 18. Manual Close Bar         |                  |
| 9. Front Wheels             | 19. Tiller Tilt Adjuster     |                  |
| 10. Deck                    | 20. Free Wheel Lever         |                  |
|                             | 21. Remote Bi-Pass<br>Switch |                  |

## 2. TRANSFORMER Specifications

Model	TRANSFORMER S3021
Overall Length	36.9"
Overall Width	18.1"
Tires	6 x 1.5" Solid Front Tire
	7 x 2.36" Solid Rear Tires
Maximum Speed	Up to 3.75 mph
Range	Up to 13.5 miles
Turning Radius	55"
Weight (without battery pack)	53 lbs
Color	Red, Blue, Yellow & Black
Brake	Intelligent Regenerative Electromagnetic Brake System
Drive system	Rear Wheel Drive
Handlebar	PU Foam
Maximum weight capacity	Up to 300 lbs
Seat Width	17"
Seat Height (from the ground)	22"
Battery	24V/10.5AH (Lithium Ion Battery)
Motor	120W
Battery Charger	DC24V/2A Off Board (Automatic Protection Charger)

### 3. Key Components

#### Handlebar Controls



The Handlebar Control consists of the steering handle, keyed ignition, directional controls, horn and speed control.



Be sure to always protect the **TRANSFORMER** Handlebar Controls from humidity and water. If the handlebar controls have been affected by moisture, be sure to dry before operation.



Always slow down when turning or operating in reverse.

## 4. Operating Instructions

### Turning on the Power

Put key in ignition and turn clockwise to turn on.

Turn key counter-clockwise to power off.

Please note - If the Free Wheel Lever is engaged the scooter will make a beeping noise when the scooter is turned on. Deactivate the Free Wheel Lever to operate the scooter.

### Free Wheel Lever

The free wheel lever is located on the rear of the scooter on the left-hand side. Pushing the lever down will allow the wheels to move freely. The lever must be pulled up to drive the scooter.

Please note - when Free Wheel is engaged the scooter will slow down if being pushed/pulled too fast.



### Directional Control Lever

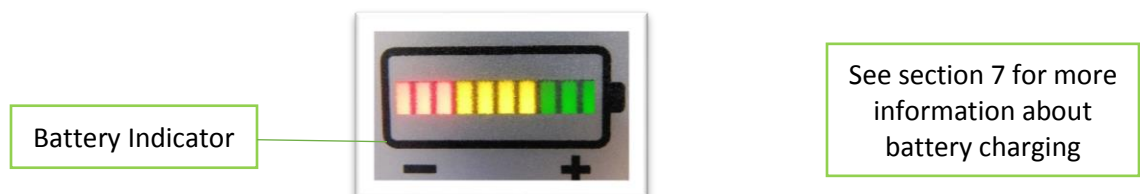
The Directional Control Lever is used to control forward and reverse motion. To move forward - slowly push the right-side fingertip control paddle towards the handlebar. The further you push, the faster the scooter will go.

To reverse - slowly push the left side of the fingertip control paddle towards the handlebar. Stop the scooter by releasing the directional control lever.



### Battery Indicator

The battery level indicator will show the battery level when the scooter is on. When 3 red, 4 yellow and 3 green lights are lit, the battery is fully charged. The lights disappear as the battery loses charge. The battery is  $\frac{1}{2}$  charged when  $\frac{1}{2}$  the bars are gone. When there are only red lights left, the battery needs to be charged.





## Speed Control Knob

The speed control knob is used for controlling the scooter's speed. When you adjust the knob to the left (tortoise), it's the minimum speed; when you adjust the knob to the right (rabbit), it's the maximum speed.

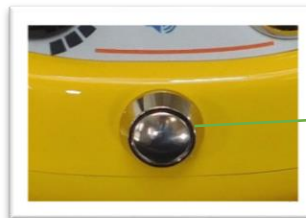


## Brakes

The TRANSFORMER Scooter is equipped with electromagnetic brakes. Releasing the directional control lever will stop the scooter.

## Horn

The horn is located on the front side of the control unit. When you press the button, the horn will sound.



Horn

## Telescoping Tiller

The tiller height can be adjusted. Unlock the height adjuster lever and pull up tiller until it reaches desired height, then lock height adjustment lever by pushing the lever back into place.



Height  
Adjustment  
Lever



Height  
Adjustment  
Lever

**Note** – Power Save mode activates automatically and turns off power if the key is on and the scooter is not in use for approximately 15 minutes.

## Adjusting the Tiller

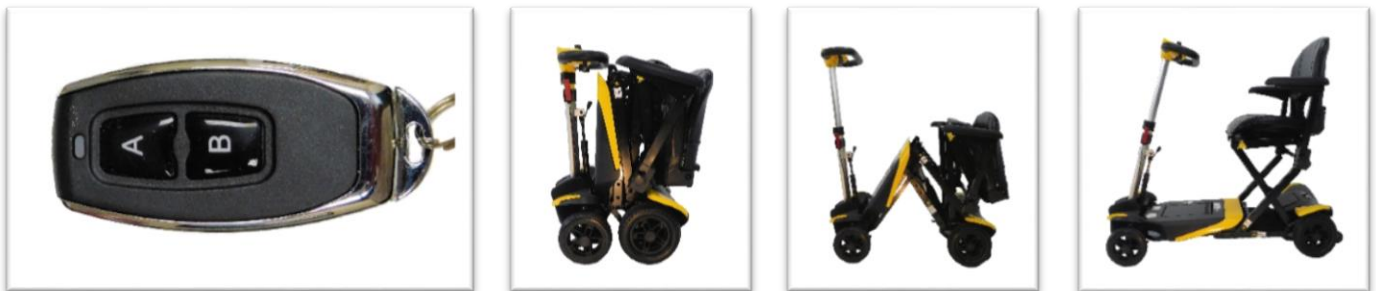
The TRANSFORMER's tiller can adjust for rider's comfort. To adjust - squeeze the tiller tilt adjuster lever towards the tiller then move the tiller towards the seat to a reach comfortable position. To put the tiller to the original position, squeeze the tiller tilt adjuster lever and the tiller will move to the original position.



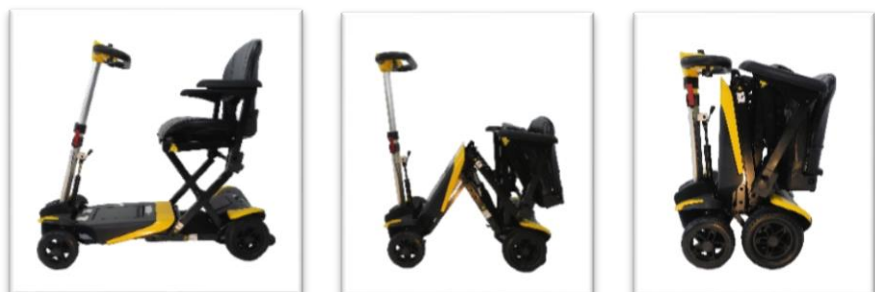
## 5. Folding and Unfolding the TRANSFORMER

### Automatic Remote Control Operation (Key Fob)

To unfold (open) the TRANSFORMER Scooter, press and hold the B button on the key fob until the scooter is fully unfolded.



To Fold (close) the TRANSFORMER Scooter - Press and hold the A button on the key fob until the scooter is fully folded.



The Telescoping Tiller can be raised or lowered before or after folding or unfolding the scooter.

Note - If the light on the key fob (above the letter A) does not turn on while pressing the A or B button then the battery needs to be replaced. The remote takes 2 CR2016 batteries and can be purchased in many locations where batteries are sold.



## Manually Folding the TRANSFORMER

The TRANSFORMER Scooter can be opened or closed manually.

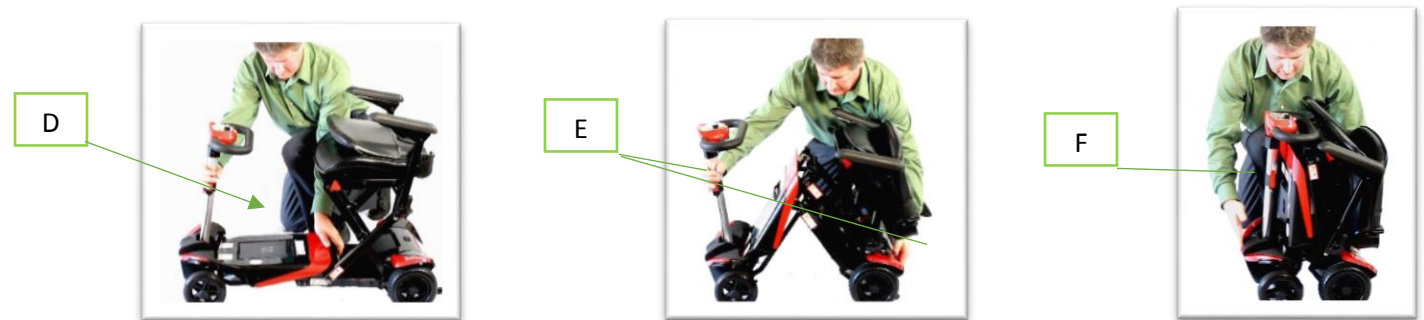
### To Open Manually -

- A. Locate the red manual release lever.
- B. Squeeze lever against the tiller and pull the tiller forward toward the front wheels. The scooter should start to unfold.
- C. Continue to unfold the scooter until it is completely unfolded. You can do this by pulling up on the back of the seat or pushing down on the deck. **DO NOT PULL THE RED LEVER.**



### To unfold Manually -

- D. Pull on the manual release bar.
- E. The front and rear frame will draw closer together.
- F. Push the front and rear of the scooter together until they are locked in place.



**NOTE -** If the scooter was closed by the remote control (key fob), then it must be opened by the remote control (key fob) or by using the Remote Bi-pass Switch on the back of the scooter. The manual release will not work. The scooter must be opened the same way as you closed the scooter.

## Remote Bi-Pass Switch

The remote Bi-Pass switch is located on the back of the scooter. The switch can be used instead of the remote control. Press and hold the 1 button to fold the scooter. Press and hold the 2 button to unfold the scooter.



## 6. Safety Requirements

### Driving Surface

The TRANSFORMER has the best stability under normal driving conditions (dry, level ground with concrete or asphalt). Extra care must be taken when riding on other surfaces (grass, gravel, etc)



It is unsafe to drive the TRANSFORMER up steep inclines.  
Please read the manual instruction completely before operation.

- Check the physical conditions (tires, battery, bolts) before driving the scooter.
- ***ALWAYS SLOW DOWN BEFORE TURNING.***
- ***ALWAYS TURN THE KEY OFF BEFORE GETTING ON OR OFF THE SCOOTER.***
- The TRANSFORMER can be used safely in short grass and hard gravel.
- Avoid driving in loose gravel, soft soil and sandstone.
- Do not drive the scooter in unknown road conditions.
- The TRANSFORMER can ride over small obstacles within a certain height, but you must minimize the speed and slowly drive over the obstacle.
- Do not operate the scooter before you have fully read and understand this manual.
- Do not carry additional riders on the scooter, chassis or lap.
- Do not operate while under the influence of alcohol or drugs.
- Ensure the seat is fixed and fastened.
- Slow down when operating on uneven or soft ground.
- Do not park on slopes.
- Changing the initial setting or refitting your scooter is forbidden.
- Use caution when operating near busy streets, markets or shopping centers. Do not operate in unsafe areas. Please consult local authorities about the traffic rules for scooters.
- Hold the handlebar with both hands and put both feet on the footboard when operating.
- Never sit on the TRANSFORMER in a moving vehicle.
- Do not exceed the maximum gradient when driving
- Do not exceed the TRANSFORMER maximum weight capacity of 300lbs. This weight includes rider, accessories and baggage.
- Do not reverse on uneven slopes or uneven ground; be careful when passing over slopes.
- Never use the TRANSFORMER to go up and down stairs.
- Never take your TRANSFORMER on an escalator.
- Do not operate on frozen, slippery or salty ground.
- Never charge a frozen battery.

## 7. Battery Maintenance & Charging

The TRANSFORMER Scooter is designed to use one maintenance free 24.9v/10AH lithium Ion Battery. It comes with an easy to use DC24V-2AH charger.

- Charge the battery completely before the first operation. Not charging the battery completely prior to operating your TRANSFORMER for the first time can cause damage to the battery.
- Make sure key is in the off position before charging the battery.
- The battery should be charged monthly when storing for long periods.

### Charging your TRANSFORMER

1. Turn off the TRANSFORMER and remove the key.
2. Open the charger cap in rear of scooter and insert the charger into the charging port.
3. Plug AC power outlet into household power outlet. Red light on the charging block indicates power is on and the unit is charging. The green light means the battery is fully charged.
4. Unplug the charger when charging is complete.



The battery can be charged out of the scooter using the optional docking station accessory.



**Match the charger port and charger plug properly. Do not force.**

### Guide to a Safe and Long Lasting Battery

#### How does the charger work?

When the battery voltage is low, the battery charger outputs a large current to charge the battery. When the battery voltage is near full, the battery charger outputs a small current. When the battery is full, the battery charger will output very little current. Therefore, the battery will continually charge after connecting the charger, but will not overcharge. It is better to charge the battery for less than 24 hours

#### What does the light on the charger mean?

The red light indicates that the scooter is charging. The green light indicates the battery is fully charged.

### **Can other chargers be used?**

To charge safely and efficiently, use the charger supplied by the original manufacturer only.

### **How often should you charge the battery?**

The charge time depends on the use.

- If you're operating the scooter every day, charge after each use so it will have a full charge the next day.
- If you're operating the scooter once a week, then the battery should be charged once a week. If at anytime the battery indicator has only red lights lit, charge the battery.
- If you are not using the scooter for more than 3 weeks, remove battery from scooter, store in a warm, dry location and charge every month. The time to charge the battery fully can vary from 12 to 14 hours.



Do not let the battery fully discharge before charging.

### **How can you get the maximum operating distance?**

Driving conditions such as hills, uneven and soft surface, temperature and user weight will affect the distance or running time for battery life.

### **Methods of obtaining the maximum driving distance**

- Fully charge your battery before operating the TRANSFORMER.
- Maintain a constant speed when possible.
- Only carry the necessities to reduce weight.
- Avoid intermittent driving.

### **Why is the power of the new battery weak?**

Deep-cycle batteries use unique chemical technology and design. It can be charged quickly and be used for a long time after full-charge. The battery is fully charged before leaving the factory but may change its initial performance during the transportation due to the temperature. The power of the battery will lessen in higher temperatures and it will extend the charging time in low temperatures. The battery requires a few days to adapt to the surrounding environment before it gets stable performance.

More importantly, a deep cycle battery will get higher performance after several charging - discharging cycles.

### **Please follow the steps below to improve the battery performance:**

- A new battery must be fully charged before using.
- Low speeds are recommended for the first time. Do not travel too far until you are familiar with the operation of the scooter and the battery.
- Fully charge the battery after operating the TRANSFORMER the second time.
- The battery capacity will reach 100% and extend the driving time after four to five charging and discharging cycles.

### **How to ensure the battery life**

A fully charged battery will provide better performance and extend battery life. Do not fully discharge the battery.

### **How to store scooter and battery**

- Charge your battery fully before you store it.
- Remove battery from the TRANSFORMER.
- Store your scooter and battery in warm, dry place. Not hot.
- Avoid storing the scooter in area with temperature variations.
- If storing the scooter, charge battery at least once per month.
- For optimal battery life, be sure to use your scooter monthly.



Do not dismantle the Li-polymer battery and do not add water. Failure to observe this warning will void the warranty and damage the battery and scooter.



If battery is frozen, warm for several days before charging.

## **8. Maintenance**

With care and regular maintenance, the TRANSFORMER is designed to provide years of enjoyment. The following will keep your TRANSFORMER running at optimum levels.

### **Battery**

- Make sure battery is fully charged.
- Store the battery in a dry environment.
- Check electrode connections for corrosion.
- Never charge a frozen battery (warm for a couple days before charging).
- Never fully discharge the battery. Charge once a month when storing the scooter.

### **Seat**

- Clean seat cover with clean, damp cloth.

### **Cleaning**

- A clean, damp, non-abrasive cloth works best to wash and clean the TRANSFORMER.
- Do not wash your TRANSFORMER with a water hose as this may create an electrical short and damage the electrical system.

## **Wiring**

- Check all wire connections and wiring insulation for wear and damage regularly. This includes the charger power cord.

## **Motor, Bearings and Transmission parts**

- These components have been lubricated and sealed by the factory, there is no need to lubricate these parts.
- Store in dry environment. Electric components should avoid moisture. If they come into contact with moisture, dry before use.
- Check and tighten bolts regularly.

# **9. Basic Troubleshooting**

## **Power stops while operating**

- Make sure key is in the ON position.
- Make sure battery is properly inserted.
- Make sure battery is properly charged.

## **Scooter not opening**

- If the scooter was closed by the remote control (key fob), then it must be opened by the remote control (key fob) or by using the Remote Bi-pass Switch on the back of the scooter. The manual release will not work. The scooter must be opened the same way as you closed the scooter.
- Check the remote battery. If the light on the key fob (above the letter A) does not turn on while pressing the A or B button then the battery needs to be replaced. The remote takes 2 CR2016 batteries and can be purchased in many locations where batteries are sold.
- If the remote control does not open the scooter, open the scooter manually (see instructions in Section 5, Unfolding Manually).
- If the remote does not work and you are not able to open the scooter manually use the remote Bi-Pass switch. It is located on the back of the scooter. The switch can be used instead of the remote control. Press and hold the 1 button to fold the scooter. Press and hold the 2 button to unfold the scooter.
- If the remote Bi-Pass switch is not working, plug in the scooter and try again.

## **Slow speeds while driving**

- Adjust speed control knob.
- Make sure battery is properly charged.

## **Battery is not charging**

- Check that the cord is plugged into the wall and scooter completely.
- If there is no light lit on the charger box when plugged into the wall, the charger may be broken. Call for service.



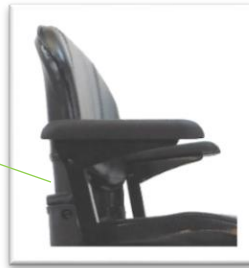
### **Lost keys or remote control**

- Call your local TRANSFORMER dealer to order replacements

### **Seat back is loose**

- Use 5mm allen wrench to tighten bolts

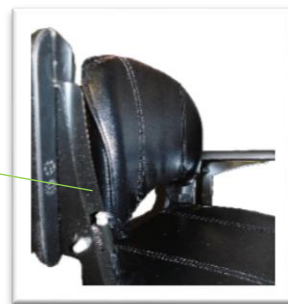
Tighten bolt  
here



### **Armrests not staying up**

- Use 4mm allen wrench to adjust bolt on armrest. If you tighten the bolt, the pitch of the arm rest will go down. If you loosen the bolt, the pitch of the armrest will go up. Tighten the nut to lock the pitch into place.

Lift armrest,  
adjust bolt  
here



If you continue to have trouble with your TRANSFORMER, contact Enhance Mobility at 800-296-4151 - Option 2 or your authorized TRANSFORMER dealer.

## 10. Warranty

Our standard warranty is as follows...

### TRANSFORMER Scooter

1 year parts for all electrical components\*

6 month warranty for battery

3 year warranty on frame

\*Please Note – tires, trim and seat covers are not covered under the warranty.

Enhance Mobility will ship the parts directly to the customer or to the service center of their choice. Enhance Mobility will provide technical assistance and documentation to ensure the scooter is repaired properly.

If after calling in to the Enhance Mobility Service line 800-296-4151- Option 2 and speaking to a service representative, it may be determined that the repair is covered under the warranty and requires return to the factory. In this case the customer will prepay for shipping to and from Enhance Mobility. Shipping Labels will be provided.

Return shipping must be in Original Packing to protect against damage. Enhance Mobility is not responsible for damage caused by shipping. Enhance Mobility will perform the necessary labor and replace covered parts at its expense and ship back to the customer.