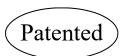
# Owner's Manual



**DISCLAIMER** 

This Vehicle is NOT recommended for persons who are confined to a wheelchair, mentally disabled and/or in need of constant personal care.



#### READ FOR YOUR SAFETY!

- This product is not a toy and is not recommended for use by persons younger than 12 years of age, except the
  - Children-version
- To prevent misuse by children or others, disconnect the battery when the vehicle is unattended.
- Always **turn off the power** before getting on or off the seat for any reason.
- The design allows for use by one person only.
- Check all locking pins and clamps before use.
- As with bicycles, it is recommended to wear a helmet.
- Practice riding in a large, open area, free of vehicles, pedestrians and obstacles.
- Do not operate at night unless adequate front and rear lights are attached.
- Driving in wet conditions is not recommend.
- Always slow down **before** turning.
- The *TravelScoot* should only be ridden on smooth, hard and flat surfaces. It is not designed for off-road or off-road -like conditions.
- Use common sense. Reckless driving can result in an accident!
- Please take your time and read **Important Safety Advisories For Driving The** *TravelScoot* (pages 14-17).

The *TravelScoot* is designed for persons who have walking difficulties, but who are otherwise still fairly mobile, able to lift 25 lbs, load and unload and able to set it up or fold it together. Persons who are confined to a wheelchair and/or require constant personal care should not use the *TravelScoot*.

#### LEGAL:

Because electric vehicles with more than two wheels and for one person only are considered as handicapped vehicles, you are permitted and entitled to use it wherever you would walk.

Before driving on public streets, check the law with your local authorities. The regulations for street use for such vehicles may differ from state to state.

#### FOLDING AND UNFOLDING

**Note:** Left and Right refer to the vehicle's left and right as viewed from the driving position. Images in this booklet may differ from your actual scooter.

First, familiarize yourself with the folding trailing arm mechanism. When you press the spring-loaded locking pins, the trailing arms are released. Keep in mind that tension on the trailing arm will cause the locking pin to bind. So be sure that the trailing arms are relaxed before pressing the locking pins.

Variations in manufacturing tolerances may make the locking pins a little tight at the beginning. Feel free to grease the locking pins with e.g. Vaseline as needed.

Folding and unfolding on a carpeted floor or grass can cause friction and may require manual aid for the trailing arms' opening and closing.

#### **UNFOLDING:**

Attach the front wheel by inserting it into the receptacle of the steering column. The spring snapper must lock into the corresponding hole. It may be necessary to raise the handlebar slightly (Fig. 10).



Hold the folded unit by the steering column with one hand, upright, with the rear wheels resting on the ground; With the other hand, press one locking pin until the trailing arm is released.

Rotate the steering column a little so that the pin does not snap back into the locked position.

Repeat this step with the other trailing arm.



Lay the unlocked frame down, while rotating the steering column upward. The trailing arms will automatically swing apart until the locking pins snap into the locked position with an audible click. If for some reason the pins don't snap in, wiggling or shaking the steering column a little should do the trick.

Fig. 3

Insert the handle bars into the T-handle so that both spring snappers lock into place.

Insert the yoke into the plastic receptacles by the battery tray. Insert the tapered stem of the yoke in the right-side receptacle. Insert both stems at the

same time, otherwise they will bind. If this happens, do not use force, but remove the yoke completely and try it again. Once in place, tighten the lever clamp on the right receptacle.

Place the battery in the tray, secure it by placing the Velcro "tails" over the Velcro pads on the battery. This Velcro will hold the battery firmly in the tray when driving over bumpy terrain. Connect the battery to the TravelScoot.(disconnect by pressing on both sides of the battery connector).

An optional second battery pack can be stacked on top of the primary battery in the same way.

(Images show SLA-batterie on top. No bag is used for Li –Ion batteries)



Fig. 5

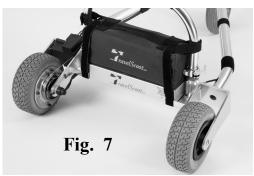
Insert the backrest by depressing the spring snapper and sliding elbow all the way into the seat mounting bracket.

## First Set-up On-

ly: There are two backrest positions. The elbow is factory-assembled with the spring snap-

per in the first hole from the elbow's end and should fit for most people. However, if you want the backrest further forward, remove the spring snapper, cut off the first hole and, and using a hacksaw, cut off the first hole section 5/8" or 16mm from center 2nd hole. De-burr the edges.

You can also bend the elbow slightly to a more comfortable position A small amount of bending already makes a big difference. Before bending, draw a template on a piece of paper **Attention:** Multiple bending back and forth results in weakening of the elbow structure. **Note:** Bending requires some force.





# In any case, before you bend or cut off anything, test your seating position extensively.

The seat height can be adjusted with the enclosed spacer rings. Once the desired height has been determined, the rings can be permanently attached on the seat stem using adhesive tape, Loctite, silicone, epoxy, etc.

ATTENTION! Keep the seat as low as is still comfortable. The higher the seat is mounted, the higher the center of gravity and centrifugal forces, and turns will have to be negotiated at a lower speed.

Now with the backrest attached and the seat spacers in place, insert the seat post into the yoke's receptacle and tighten the lever clamp.

Note: If you have problems getting seated on the vehicle when the seat is locked in the driving direction, loosen the lever clamp, apply the parking

brakes, rotate the seat to the left or right, sit down and rotate yourself into the driving position, then tighten the lever clamp.

Adjust the handlebar to the desired height and tighten the lever clamp.

To carry light-weight items you can install the fabric caddy between the trailing arms by attaching it to the six Velcro rings around the trailing arms. The small pocket in front can hold your





tool kit etc.

When traveling, you can place a small suitcase (of the size permitted by airlines for carry-on luggage) across the trailing arms. It will fit neatly under the seats and your legs. For shopping, you can also place a suitable card-

board box across the trailing arms. Loaded like this, getting on and off the vehicle might be difficult. Simply remove the backrest and get onto the seat like on a men's bicycle.





# **FOLDING**

*Option 1*) *Keep the frame folded,* but uncovered in the trunk for faster set-up.

OF

(Option 2) Store everything in the compact carrying bag.

# (Option 1)

Extend the steering column  ${\bf up}$  to the maximum height and keep the handlebar assembled.





# (Option 2)

Slide the steering column **down to the minimum** height and remove both handlebars from the Thandle so that they hang down. Tie them with a bungee cord.

(The bungee cord can also be used to secure canes and crutches to your scooter)

# (Option 1 and 2)

Remove the seat with the backrest.

Disconnect the battery from the TravelScoot and remove it from the tray.

Release the clamp on the right yoke receptacle.

Pull the yoke out of the plastic bushings evenly, using both hands so that it doesn't bind.



Press on one of the locking pins with one hand and, with the other hand, slightly rotate the steering colum sideways and down until the pin is prevented from snapping back into the locked position. Repeat this procedure on the other trailing arm.



Slowly rotate the steering column downward until the pins lock with an audible click. As you do, the trailing arms will come together automatically. You may gently assist this motion.



Now you can use the steering column as a carrying handle.

### (Option 2)

Place the battery into the center of the carrying bag and secure it with the Velcro straps. Observe that the connector is sidewise and not under the battery. When the bag is dropped for some reason, the weight of the battery could deform or shatter the connector.

Note: At this point you may lay the bag with the battery in the trunk of your car and continue to pack inside the trunk. This eliminates the need to lift or carry the complete compact unit.

Detach the front wheel from its receptacle (see also Fig. 1), lift the folded frame by the steering column and lower it into the bag, so that the rear wheels are positioned on the bag's end. The frame's cavity between the trailing arms will fit perfectly over the battery. Place the front wheel into the front section of the bag. Separate the backrest from the seat and place the seat in the front of the bag, to the right of the frame, seat post pointing inward, front (point) pointing up. Lay the backrest face down on top of the rear wheels with the elbow pointing down between the folded frame. The yoke will fit on top of the backrest.

The total weight of the complete vehicle with the SLA battery is about 50 pounds (22 kg). If this compact pack is still too heavy for you to lift or carry, simply leave the 20 pound SLA battery pack out to reduce the weight by almost half.

### Batterie indicator lights on the throttle

Green-yelow-red No green; yellow and red only No green or yellow; red only Full charge to 70% charge 70% to 40% charge 40% charge to empty

Please note that the battery charge indicator is accurate only while driving. At standstill, it will indicate a false higher charge condition

#### Charging the lithium-ion battery

Connect the charger to household current first. Observe the light indications. The inner LED will blink three times and go out. The outer LED will illuminate red and will remain that way. Now connect the charger to the battery. The second (inner) LED will now show steady red. This LED will change to solid green when the battery reaches full charge. This can take up to 12 hours, depending on battery type and state of charge. We suggest charging the battery overnight. It is not necessary to fully charge or discharge the battery. The battery charger can heat up during the charging process, so do not cover the charger while in use.

#### Brakes

Each wheel is equipped with an independent brake, and the brakes should be applied simultaneously. Each brake features a parking brake. To engage, squeeze the brake lever and then depress the parking brake lever until it catches. To release, simply squeeze the brake lever again.

The band brakes are very effective even on downward slopes, but this should not lead to the temptation of rolling downhill without applying the brakes. For the safety of the driver as well as others, you should never exceed reasons the TravelScoot's maximum level-ground speed in any situation. Also avoid locking up the brakes. This causes the wheels to skid, leaving flat spots on the tires which will be felt at every revolution.

Please be extremely cautious when unintentionally stopped, or even rolling backwards, on inclines. The brakes are less effective in reverse. We strongly recommend not attempting to ride up steep inclines, but getting off and pushing the TravelScoot instead.

The brakes can be adjusted by hand at the adjusting nipples located on the brake levers on the handlebars as well as on the rear forks, and at the brake bands using an 8 millimeter wrench.

#### Maintenance

Maintaining the TravelScoot is very simple.

The tool kit included with your TravelScoot contains all necessary Allen wrenches for your scooter, and can be kept in the Velcro pouch at the front of the caddy.

The TravelScoot's moving surfaces (front fork receiver in the bottom of the steering column, telescoping handlebar extension, seat back bracket beneath the seat) require occasional lubrication. Vaseline in the cleanest and easiest lubricant to use. We also recommend dry silicone or Teflon spray. Also, periodically check all screws, clamps, nuts and bolts for tightness. This simple measures will improve reliability and safety. The brakes can be adjusted by hand at the adjusting nipples located on the brake levers on the handlebars as well as on the rear forks, and at the brake bands using an 8 millimeter wrench.

Check the following items from time to time:

#### Seat assembly:

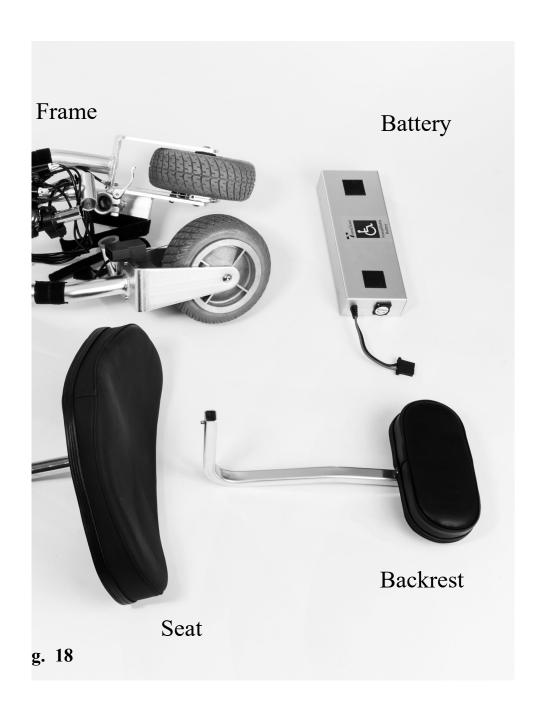
The screws that hold the seat plate to the seat can loosen over time, as the plywood base ages and compresses. Replacement screws (6 millimeter by 16 mm long) are available at any hardware store.

It is possible that the seat post that connects the seat to the yoke can loosen over time, in minute increments due to frequent lifting of the seat. This can result in the damage to the seat plate or even the seat falling off if this condition is ignored. To remedy this, remove the seat (with seat post) from the seat yoke, loosen the fixed clamp holding the seat post, and tap the seat post down firmly with a rubber mallet (or hammer and wood block) until the seat post bottoms out in the seat plate, and retighten the clamp as firmly as possible.

#### Hub motor (after 2012) - Important

Check the axle nut for strong tightness (18 or 19 mm metric open-end wrench or a ¾ inch standard open-end wrench). If this nut becomes loose, the motor axle may rotate, twisting and damaging the internal electric cable. This would result in having to replace the entire motor.!





### IMPORTANT SAFETY ADVISORIES FOR DRIVING THE *TravelScoot*

Never leave the power switch in the ON position when not properly seated. See also page 17

It is essential that you understand the characteristics of a mobility scooter. Typically, in order to maneuver in tight spaces or crowded areas, their width and length are close to that of a seated human body. This configuration provides reasonable safety on flat, level surfaces but is not entirely fool-proof on uneven, slanted or inclined surfaces. The center of gravity (hereafter referred to as C.G.) is relatively high and can shift considerably under such conditions. As a general rule, always shift your upper body toward the high side of the terrain.

#### To avoid critical situations, follow these guidelines.

Unlike a two-wheeled vehicles, three- and four wheeler cannot be "leaned" into a curve. Therefore, it is essential to slow down to a reasonably low speed before turning. Even at slower speed you may still feel some slight centrifugal force. Use extreme caution when turning on slanted or uneven surfaces! Occasionally you may find yourself negotiating a curve or corner too fast and the inner rear wheel starts losing ground contact. If that happens, immediately shift your upper body into the curve and lessen the steering angle in order to restore weight on the lifting or airborne wheel.

**Inclines** require special attention to avoid mishaps. The following is a list of do's and don'ts.

The C.G. on an incline (such as ramps) is shifted toward the rear, and in conjunction with some other events, tipping over backwards is possible, but can be easily avoided.

- Always shift your upper body toward the handlebar in order to move your C.G. forward.
- Always twist the throttle slowly, even on level ground! The motor has high torque. Quickly twisting the throttle, causing excessive acceleration, could tip you over backwards.
- Avoid starting on an incline from a full stop. Approach a ramp with reasonable speed and utilize the vehicle's momentum.
- Approach an incline only if you are sure that you will reach the top without having to stop. If you are forced to stop along the way, restart by shifting your upper body forward and accelerating gently.

- When negotiating an incline, do not zigzag or drive at an angle up the face of the incline. Drive your scooter straight up. This will greatly reduce the possibility of tipping or falling.
- Never travel up or down a potentially hazardous incline (i.e., areas covered with ice, snow, cut grass, wet leaves, gravel). Do not drive in snow and mud.
- When driving down a ramp, keep the throttle at idle and both hands ready to apply the brakes to ensure a safe, controlled descent.
- If you drive the vehicle down a longer slope, apply brakes continously and **under no circumstances** allow it to gain more than walking speed. Otherwise you may **not** be able to stop quickly enough, or in the worst case at all.

**Speed bumps, lowered curbs and other slightly uneven conditions** are generally no problem, but they should be taken at a reduced speed and in a direct frontal direction. Never approach them at a slant angle, and observe the same precautions as on inclines.

Keep in mind that the small wheels cannot roll over objects much higher than 1 inch (3 cm), and you may fall if you attempt to do so. Lower objects should be approached with moderate speed. If you are at a stop and one of the wheels is blocked by such an object, do not apply throttle, doing so may result in flipping over backwards.

You should not tow anything by the backrest. This could create additional leverage forces against the backrest with the potential of flipping over backwards. If you tow something anyway, (like your wheeled suitcase) be aware that you can operate one brake only. Drive slowly and do not lean against the backrest.

**Doors:** Doors can be a real nuisance, especially when they are spring-loaded. A good option is to ask a nearby person to hold the door open for you. If you are on your own, **avoid any acrobatic actions** like using your feet to hold doors open while passing through them. This could also create additional leverage forces against the backrest with the potential of flipping over backward. Instead, get off the vehicle and walk it through the door.

In summary, as with every other vehicle, use common sense. It is completely up to you to judge the drivability of a chosen terrain. Reckless driving can result in an accident!

The *TravelScoot* requires some skill to operate safely. Before entering crowded areas for the first time, familiarize yourself with the operation of the vehicle in a large open area, free of vehicles, pedestrians and obstacles.

**Throttle:** To become accustomed to operation and response, turn the twist grip slowly, similar to a motorcycle.

Because the drive is located on the left rear wheel, left turns from a stop are only possible with the front wheel turned no more than about 45 degrees. This still provides an adequate amount of maneuverability, similar to a four-wheeled scooter. More than 45 degrees will gradually block the drive. Tighter turns are possible once you are in motion. However, right turns are possible virtually on the spot and must be conducted carefully and with very little throt-tle applied. Whenever you are riding into confined spaces, like small elevators, approach them so that you can exit safely with a right turn or in reverse.

**Indoor use:** In general you are permitted to use the *TravelScoot* inside of buildings such as airports, shopping malls, stores, theaters, etc. However you are obligated to adjust your speed to that of the walking traffic. Do not ride on escalators!

**Outdoor use:** You may drive across short sections of grass or gravel surfaces as long as they are level and reasonably firm. Approach them with moderate speed. Depending on your weight, you may not be able to restart on these types of surfaces from a standstill. Also, keep in mind that prolonged riding under such conditions will quickly drain your battery.

The electric motor, wiring, connectors, batteries and controls can be damaged if exposed excessively to water. Light rain is no problem. Avoid driving the *TravelScoot* in heavy rain or through puddles of water. If you cannot avoid puddles, cross them with extremely low speed in order to avoid splashing water



### **Getting started**

Plug the battery connector into the black plastic receptacle at the front of the left rear wheel fork (unplug by pressing both sides of the battery connector).

Attention! Before turning on battery power, sit down firmly in driving position with both your feet on the footrest. Turn off power before leaving the seated position! Accidental twisting of the throttle while the power is still ON and the vehicle not properly loaded can cause the scooter to rotate upwards and endanger yourself and others.

Press the ON- OFF button on the left side of the handlebar. A partially charged battery will cause all three lights on the throttle light to illuminate light up.

The direction of travel is selected with the sliding switch above the ON-OFF button; <u>Slide to the right for FORWARD</u>, and left for <u>REVERSE</u>.

Always twist the throttle rearward <u>slowly</u> (as with a motorcycle). Avoid jerking the throttle because it would also cause the vehicle to jerk. If this happen, just release the twist grip and the scooter will settle down and stop.

### HINTS FOR THE WALKING IMPAIRED AIR TRAVELLER

Arrive early at the airport. When checking in your luggage, simply remain seated on your *TravelScoot*, and you will be allowed to drive directly to the departure gate. As with wheelchairs, you will receive preferred treatment at the security checkpoints.

Passengers with children's strollers or mobility devices are usually asked to board the airplane first, so that airline handlers have enough time to store such items in the baggage compartment. While you wait for boarding, park yourself and your *TravelScoot* near the airline desk so that airline personal can see you.

Once you have prepared your *TravelScoot* for loading in the cargo bay, (see www.travelscoot.com/tips), airline personnel will attach a label for gate delivery at the destination airport. After arrival, just stay seated until most passengers have disembarked; When you leave the plane, your *TravelScoot* should be waiting for you at the door of the airplane. With most passengers already gone, you have enough space to set up your scooter.

**Attention!** The jetway often is rather long and/or steep, with bumps at the telescope joints. In addition, there is virtually no suitable run-up space, which could makes driving hazardous. If you encounter these conditions, put your luggage on the vehicle and walk it up the jetway, and begin driving from once you are past the end (see pages 14 - 17 for handling incline conditions).

Large airports often use trains to transfer passengers to multiple terminals. Usually, you can easily board such trains with your *TravelScoot*,, but be aware that the train's frequent stops and starts can make you roll back and forth involuntarily. It is advisable to park across to the train's direction of travel. Apply both parking brakes and hold onto a handrail or bar.

Fig. 19

If you are using walking aids such as a cane or a pair of crutches, there is a designated place for them on the *TravelScoot*. You can place your walking aids either upright or lying down in the cups near the footrests. Secure them with a bungee cord

#### **SPECIFICATIONS**

Dimensions:	
Folded and inside the bag	Unfolded and assembled
Length = 87 cm ( 33.5" )	Length = 96 cm ( 37")
Width = 37 cm (15")	Width = $60 \text{ cm} (23.5^{\circ})$
Height = 25 cm ( 10" )	Height = Variable, depends on adjustments

Weight 30 lbs or 14 kg (without battery)

Maximum Speed 4mph (6km/h)\*

Distance per charge 12 km with SLA, 16 km with Li-Ion \*

Carrying capacity 320 lbs or 145 kg on the seat plus

some carry-on luggage

Motor 24V, 200 Watt DC

Tire size Front 8" x 2." Rear 8" x 2.50"

foam filled

Battery 24V, 12Ah Sealed Lead-Acid (SLA)

or 25,2 V 11,25 Ah Li-Ion

Charger 110/240VAC, 50/60Hz

24VDC/2Ah

Charging time ~ 5 hours SLA 8 hours Li-Ion

Brake Band brakes on both rear wheels

with dual parking brakes

Drive Rim motor inside the rear left wheel

Keep in mind that uphill conditions as well as frequent stops and starts will reduce the distance per charge.

Therefore, as with every battery-operated device, the purchase of a second battery pack is strongly recommended.

<sup>\*</sup> Speed and distance were ascertained by GPS with a new battery and a 220 pound person on a paved level surface and only few stops

# Accessories

We offer a variety of useful accessories for your TravelScoot



www.travelscoot.com

#### **ABOUT BATTERIES**

Most mobility scooters come with **sealed lead acid (SLA) batteries.** The main reason is that they are fairly inexpensive and readily available worldwide in standard sizes. The downside, however, is that the weight/energy density ratio is rather low and the overall battery life is limited and depends heavily on proper treatment. Frequent deep-cycle discharging causes internal oxidation, and over time the capacity is reduced considerably. In that, distance statements on SLA batteries usually ignore this deep-cycle deterioration factor, and therefore, a downward adjustment of these performance figures seems appropriate.

Fortunately, in recent years battery technology has made significant progress, and a variety of state-of-the-art, high-performance batteries have been introduced. Not all are suitable for electric vehicles, but some are very promising. They come, however, with a healthy price tag. But overall, they are well worth their money, especially for the frequent user.

**Li-Ion (Lithium-Ion).** This battery has 7 times the energy density of an SLA battery. In other words, with just 20% of the weight of a SLA battery, it provides 40% more distance per charge. This battery brings the total weight of the *TravelScoot* down from 50 to a mere 35 pounds.

TravelScoot has this battery in stock.

### **TROUBLESHOOTING**

#### No light on the throttle after PWR is turned on

Possible cause: Empty battery. Recharge or replace battery. Battery-connector not fully engaged. Disconnect and re-connect.

### Handlebars not aligned with the front wheel

Fix: Slightly loosen the lower clamp on the steering column, hold the front wheel with your feet while aligning the handlebar with the wheel. Re-tighten the clamp.

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### **TravelScoot**

# Limited Warranty

This limited warranty is the only warranty for your *TravelScoot*. There are no other expressed or implied warranties. The only uses for this product are described in this manual.

The limited warranty extends only to the original owner and is not transferable to anyone else.

This limited warranty covers all parts of the *TravelScoot* electric scooter and is effective only if:

- The product is completely and correctly assembled.
- The product is used under normal conditions for its intended purpose.
- The product receives all necessary maintenance and adjustments.

The *TravelScoot* electric scooter is designed for general transportation and recreation use only. This limited warranty does not cover normal wear and tear, normal maintenance items, nor any damage, failure or loss caused by improper assembly, maintenance, adjustment, storage or use of the *TravelScoot* electric scooter. This limited warranty is void if the product is ever:

- Used in any manner contrary to the instructions in this Owner's Manual.
- Modified in any way.
- Ridden by more than one person at a time.
- The unit is used for commercial purposes (rental, public use etc.)
- Operated with a battery not supplied or recommended by TravelScoot.

The manufacturer of the *TravelScoot* electric scooter is not liable for incidental or consequential loss nor damage, due directly or indirectly, from the use of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this may not apply to you.

The *TravelScoot* electric scooter is warranted for two years from the date of purchase. The Battery is warranted for 6 months.

The manufacturer will replace without charge to you any component found to be defective within the warranty period.

This warranty gives you specific legal rights. You may also have other rights which vary from country to country.