

User Manual



Titan

Dear User,

Tzora Active Systems Ltd. thanks you for choosing the Titan Scooter and wishes you safe and enjoyable journeys.

For proper operation and to maintain the scooter's operational readiness, we recommend that you read this user manual prior to using the scooter..



15 Abraham Giron St. P.O.Box 217, Yahud
Tel: 03-5398999, Fax: 03-6320879
Internet Mail :info@tzora.com
Internet Address:www.tzora.com

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Components

Your power scooter comes partially disassembled for protection during shipment. After unpacking, please familiarize yourself with the following components (See Figs. 1 and 2)

1. Control Panel
2. Front Column
3. Front Wheel
4. Foot Platform
5. Seat Shell
6. Foldable armrests
7. Rear basket and support tube
8. Battery packs (detachable)
9. Rear wheels
10. Anti tip wheels
11. Battery Charger



Figure 1

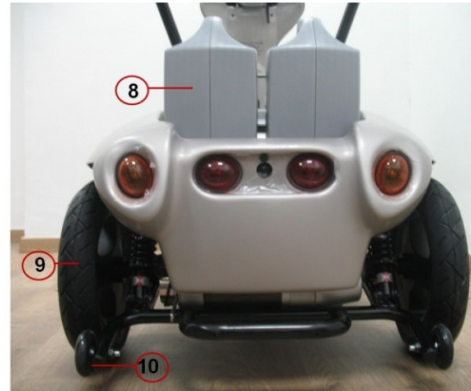


Figure 2

Safety Instructions

Operation

These safety considerations and tips will help you operate the Titan safely. The Titan is a powerful electric vehicle, and the following rules will help you prevent personal injury and damage to your scooter.

- Make sure that your weight does not exceed the recommended weight limit of the scooter. Do not carry passengers. (See Technical Specifications table).
- Always ensure that the power is switched off, when getting on or off of the scooter.
- When getting on and off the scooter, do not step on the foot rest.
- At all times while driving, keep your feet on the foot rest
- Be aware of the environment around you when choosing a desired speed. For indoor environments, we recommend that you select the slowest speed setting. For outdoor operation, select a speed that is comfortable for you to control it safely.
- Reduce speed when making sharp turns.
- Do not switch off the power when the scooter is still moving forward. This will bring the scooter to an extremely abrupt stop.
- Avoid jerky stop/start motions as it will result in excessive battery drain and increased tire wear. To brake in an emergency, simply release the forward/reverse lever.
- Make sure the wheel release lever is in driving mode prior to operation (See Fig. 3.)
- Make sure the forward/reverse lever is in the proper position according to your desired direction.

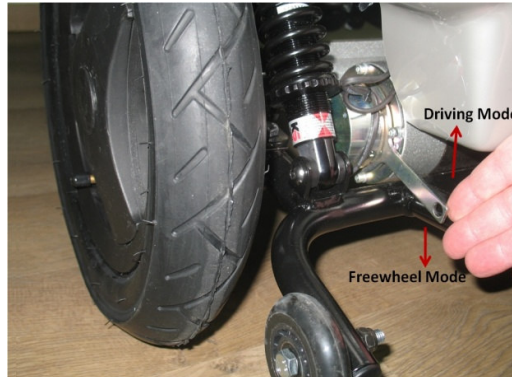


Figure 3

Ramps and Curbs (Sidewalks)

- Use extra caution when driving down a slope.
- Never drive across a slope.
- Don't turn sharply on a slope.
- Don't drive in reverse on a slope or on a bumpy surface.
- When driving over a curb or raised surface, make sure that the bottom of the scooter has sufficient clearance. (See Technical Specifications.)

General Instructions

- Do not attempt to lift or move a power scooter by any of its removable parts. Personal injury and damage to the power scooter may result.
 - Do not drive the scooter on a major roadway.
 - Avoid driving in the dark or in times of limited vision.
 - Do not connect any electrical or mechanical devices to the scooter. Doing so may cause personal injury or damage to equipment, and voids the manufacturer's warranty.
 - Do not operate your vehicle if it is not functioning properly. Contact your service center immediately.
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Influence of Medication or Alcohol

- Check with your physician if you are taking any medication that may affect your ability to operate your power scooter safely.
- Do not operate your vehicle while you are under the influence of alcohol, as it impairs your ability to operate your power scooter in a safe manner.

Assembly Instructions

It is very easy to assemble your scooter. Please follow the steps below.

Contact your service center if any problems occur.

Chassis Installation

1. Insert both batteries into the back chassis. (See Fig. 7).
2. Using the handle located behind the seat, raise the front chassis and connect it to the back chassis. Make sure they are aligned and locked (See Fig. 4).



Figure 4

Tiller Positioning

1. Pull up the tiller handle, in order to release the position lock (See Fig 5).
2. Adjust the tiller to a driving position, according to your own preference.



Figure 5

Installing the Seat

1. Raise the backrest to an upright position while pushing the handle down.
2. Raise the seat until it reaches a locked position. (See Fig. 6).



Figure 6

Installing the batteries

1. Take the batteries out of the box.
2. Place the battery into the rear area with the protruding part towards rear. (See Fig. 7).
3. Then, connect the side with the electrical connection.

Note: The batteries are partially charged. We recommend charging them fully prior to usage.

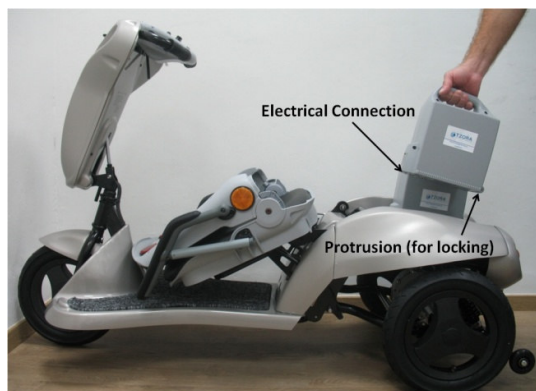


Figure 7

Installing the Basket Support Frame and Rear Basket

1. Assemble support frame by inserting the legs of the frame into the two tubes located between the batteries and the seat. Make sure the frame is secure and stable.
2. Insert the basket into the frame. Make sure it is seated straight and secure. (See Fig. 8).



Figure 8

Moving the Scooter

When moving the scooter (without operating it), be sure to follow these instructions:

1. Turn the power off.
2. Ensure that the scooter is in Freewheel mode. (See Fig. 3).
3. Move the scooter carefully and slowly.
4. If you wish to stop the scooter, move the lever to Drive position

Note: Do not shift the scooter to freewheel mode when on a slope.

Disassembly

If necessary, the Titan scooter can be easily disassembled. To transfer the scooter safely, follow these steps:

1. Turn the power off.
2. Fold the seat down. Slightly raise the seat up and push it down towards the surface. (See Fig. 9).



Figure 9

3. Remove the rear basket and the basket support frame. (See Fig. 10).



Figure 10

4. Disconnect and remove the batteries from the rear chassis (See Fig. 11).

Note: Pull the battery up first to disconnect from electricity.



Figure 11

Note: To avoid damage when moving the scooter, make sure it is stabilized in a fixed position.

5. Raise the tiller handle slightly in order to release the tiller lock. Then fold the tiller towards the seat. (See Fig. 12).



Figure 12

6. Lift the front chassis using the hand support located under the seat. Disconnect the front chassis from the rear chassis. (See Fig. 13).



Figure 13

Adjustments for Seating Comfort

Your power scooter allows you adjust the tiller and the arm rests to maximize seating comfort and configure the scooter for your body structure.

1. Tiller Angle Adjustment

- A. Pull the tiller lever up.
- B. Move the tiller to the desired position and release to lock.
- C. Pull the lever gently forward and backwards to ensure that the tiller is locked in place. (See Fig. 14).



Figure 14

2. Hand Rests

When getting on or off the scooter, you can raise the hand rest for easier access and motion. (See Fig. 15).



Figure 5

Operating the Titan Scooter

Operating the scooter is not complicated. However, we recommend reading these instructions prior to using the scooter, to ensure full understanding of the scooter operations.

Note: Be aware of the environment around you when choosing a desired speed. For indoor environments, we recommend that you select the slowest speed setting. For outdoor operation, select a speed that is comfortable for you to control safely.

Control Panel

The control panel is located in the center of the tiller. It enables you to control the steering, lights and signals of the scooter, supplies information on the battery status, and shows fault warnings. (See Fig. 16).



Figure 16

The following table details the various systems on the control panel:

	Functionality	Description
1	Operating Key	Main On/Off switch (power source) for the Titan. (Remove the key when the scooter is not in use)
2	Operating Lever (Left/Right)	Moving the lever controls the speed. To drive forward, pull the right lever toward you and push the left level away from you. Releasing the lever will bring the scooter to a gradually stop. To drive backward, pull the left lever towards you.
3	Horn	Pressing the button sounds the horn.
4.	Manual Speed Adjuster	The maximum speed is 11 km/h. Rotating the button to the lower speed (picture of turtle) will reduce the speed, for slower, gentle operation.
5.	Turn Signal	Operates the turning signal lamps
6.	Hazard Lights Signal	Operates the emergency warning lights.
7.	Speed Selector Switch	Set the switch to the lower (turtle) position for slower operation.
8.	Battery Charge Indicator	Shows the state of the battery whenever the scooter is operation.
9.	Operation Indicator	Shows operational faults (See Table of Faults)
10.	Lights Switch	Turns the front and rear headlights on and off.
11.	Main Handles	Padded handles for comfortable hand support.
12.	Tiller Adjustment Handle	Adjusts the tiller to your preferred position.

Suggestions for Safe Driving

- Before operation, make sure the front and rear chassis are connected and locked.
- Drive at a moderate speed to maintain your own and others' safety.
- Releasing the operating handle will bring the scooter to a stop.
- Operate with caution whenever going up or down a ramp or slope.
- When entering an elevator, drive in reverse so that you can then exit the elevator facing forward. Check that the elevator stopped at exactly the height of the floor.

Batteries and Charger

Batteries

The Titan scooter is programmed to work with sealed, maintenance-free 12V batteries.

Note: Turn off the scooter before removing or installing batteries.

Full charging of the batteries prior to usage helps keep them operational and lengthens their lifespan. Batteries can be charged at any time, without concern for over-charging.

Note: Do not use a car battery. Car batteries are not designed for the Titan scooter, and can be dangerous. Battery lifespan is influenced by treatment, number of recharges, storage and usage.

Charging the Battery

The charger works with standard wall outlet, between 100-240V. The charger automatically prevents over-charging.



Figure 17 – Back panel of battery charger

Note: The battery cannot be charged if it empties completely. It is recommended that you recharge as often as possible.

The batteries can only be charged while they are connected to the scooter.

Plug the charger connector into the scooter input outlet, and then connect the charger to the power source. (See Fig. 18).

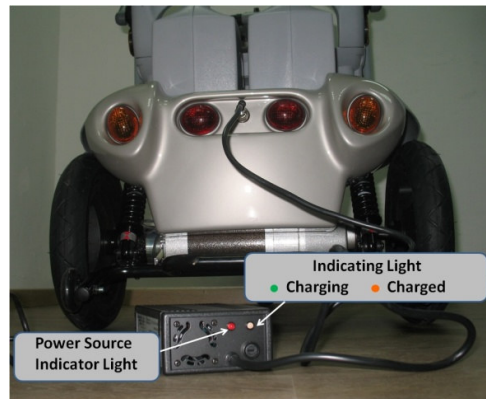


Figure 18

While charging, the charging indicator light will be lit orange. When the batteries are close to fully charged, the indicator light will change to green. For maximum battery utilization, charge the battery overnight, or at least 4 hours past when the light turns green.

Safety Instructions

Follow these instructions to prevent damage or harm during charging:

- Make sure the key is removed (Off) before charging.
 - Use the charger only for charging the scooter batteries.
 - Charge the batteries in a well ventilated area.
 - Do not smoke near the batteries and keep away from source of heat or flames.
 - Charge the batteries indoors or in a covered area, and avoid water. Always dry hands before charging.
 - Remove jewelry before charging.
 - Do not use charger cables that are damaged in any way.
 - It is recommended that you charge both batteries together if they are weak.
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- If you do not use the scooter for an extended period, be sure to charge the batteries at least once a month.
- Charge batteries overnight. There is no concern for over-charging.

Battery Storage

Before storing, make sure the battery packs are fully charged. When stored, bring out the batteries to charge at least once every 3 months.

Temperature for storage: -20°C to +40°C

Temperature for charging: 0°C to +40°C

Temperature for operation: -20°C to +50°C

Battery Troubleshooting

The battery indicator shows the battery status, and warns about problems by flashing.

Action	Description
Indicator is lit, with no flashing	System is operational
Slow flashing indicator	Charge the batteries as soon as possible
Quick flashing indicator	Trouble indicator. Perform the following actions: 1. Turn off the scooter. 2. Make sure the rear wheels are locked. 3. Make sure the charger is disconnected from the scooter. 4. Make sure the operation lever is set in the middle. If the lever does not return to center, do not operate the charger and contact your service center. 5. Turn the scooter on and begin driving 6. If the indicator continues flashing quickly, count the number of flashes in each sequence, and check the specific problem in the Troubleshooting table at the end of this manual.

Safety Measure

1. Read the directions before charging.
2. Charge in a well ventilated place.
3. Use only the manufacturer recommended battery type.
4. .Disconnect from the power source immediately upon completing charging.
5. Each battery back contains sealed lead acid batteries.
6. Battery replacement should only be performed by an authorized agent.

Note: The batteries may emit a minimal amount of acid fumes. When removing batteries, always place them on cardboard, newspaper, or any other surface that will prevent damage to valuable surfaces.

Maintenance and Repairs

Your scooter requires only minimal maintenance. Like any motorized vehicle there are some maintenance actions that are required.

- Avoid driving the scooter in the rain. Keep the scooter covered and stored in a shaded and dry place, away from damp and wet areas. Keep the batteries away from sun and rain.
- Keep the scooter clean. Clean the seat using a moist towel. You can use a mild carpet cleaner. Painted areas can be further protected using car wax. Do not get the electrical cables or connectors wet.

To ensure a long and trouble-free operating life, we recommend the following regular maintenance activities:

Daily Checks

- Visually inspect the vehicle and the wheel condition.
- Watch the battery status.
- Make sure the operation lever returns to neutral position after release.

Weekly Checks

- Operation lever check – Pull the lever to maximum speed. Turn the key to On. The scooter should not move, and the indicator light should flash. If the scooter moves at all, contact your service center.
- Braking check – Perform this check in a flat area, away from any hindrance within 1 meter.
 - Turn on the scooter.
 - Pull the operation lever to the Forward driving position, until you hear a click. Release the brake. The scooter should move forward slightly.
 - Release the operation lever. Within a few seconds, you should hear the click of the brake locking.

- Repeat the check for reverse driving as well.
- Air pressure check – The wheel air pressure should be 2.5 bar / 35 psi.
Keeping the air pressure at the proper level will lengthen the tire lifespan,
and will increase the travel radius per battery charging.

Semi-annual Checks

- Use lubricating liquid (WD40 or similar) on the following areas:
 - Tiller locking pin and its seating
 - Chassis locking pin
 - Seat folding hinges
- Check the wear and tear on the wheels.

Annual Checks

- We recommend that an authorized technician perform the annual check.
The technician will check all connections, the electric motor status and
the battery condition.
- Fuse replacement should be done only by a service representative. Fuses
are located in the following locations.
 - 60A Battery pack fuse – One in each battery pack
 - 5Ax2 electrical circuit fuse – Under the controller lid

Periodic Checks

- Clean the scooter with a moist towel only. Do not wash the scooter with a
hose or direct contact with water.
- Keep dirt out of the wheel axes, including lint, hair, sand and carpet fibers.
- Check the wheels. If the wheels are worn, replace them immediately.

Note: If you find a fault, contact your service representative. Do not
try to fix problems on your own. Repairs performed by people
other than authorized representatives may cause harm to the
people and or the scooter, and will void the warranty.

Troubleshooting

Fault Description	Action That You Should Take
Scooter drives slowly, and indicator light flashes slowly	Batteries are low. Recharge the batteries.
The wheels pull to one direction	Check the tire's air pressure
Noises come from the motor and/or the wheels	Make sure no foreign objects or dirt is stuck in the wheel or wheel basin. If you do not find any interfering objects, contact the service center.
The scooter does not turn on	• Check that the key is inserted properly. • Make sure that the batteries are inserted in the right position. • Check the battery charge.
Batteries do not charge	• Check the connection between the charger and the scooter charge outlet. • Make sure that the batteries are inserted in the right position. • Make sure the charge indicator light is lit during charging.
The scooter turns on, but does not drive	• Make sure the wheel release handle is in drive position (See Fig. 3). • Verify that there are no objects interfering with the scooter. • Check the battery charge status.

If the scooter does not operate properly and the indicator light is flashing quickly, count the number of flashes in each sequence, according to this table:

Number of Flashes	Description
1	Either the battery needs charging, or the batteries are not connected properly.
2	There is a disconnect in the motor connection. Check the motor connections between the motor and the controller.
3	There is a short circuit between the motor and the battery.
6	Check if the charger is connected.
7	Problem with the operation lever. Make sure it is set in the middle before operating the scooter.
8	Problem with the controller. Make sure all the connections into the control panel are tight and secure.
9	Disconnect between the controller and the brake. Make sure all connections to the brake and the controller are tight and secure.
10	Controller overload. Likely a result of a failure in the battery connection. Check the battery and connections to the controller.

Technical Specifications

Item	Specification
Category	Class B
Maximum speed	11 km/h
Power supply	24V from 2 charged sealed lead acid, maintenance-free batteries. (12V-26Ah)
Charge time	7-10 hours
Estimated range	25 km (on proper battery, according to recommended operating conditions and weight)
Battery pack weight	9.5 kg (x2)
Maximum ramp angle	8°
Floor clearance	10 cm
Maximum weight of load	136 kg
Weight of scooter (including battery)	64 kg
Front chassis weight	22 kg
Rear chassis weight	23 kg
Wheels	12 ½X12 ¼
Wheel air pressure	35 psi (2.5 bar)
Dimensions (Length, Width, Height)	143X62X95 cm