

# J S E R M A N U A L



Read this user's manual carefully before using your vehicle.

# **PREFACE**

This product is designed for an environmentally friendly transportation. Throughout the guide you will see the advantages and characteristics of the vehicle. Its general specifications are as follows;

- High efficiency brushless DC motor
- Electronic control unit (Controller) which protects from high and low voltage.
- Braking system with electric cut-off feature for safe driving.
- High capacity battery providing longer range and high performance
- Front suspension providing a pleasant and comfortable driving pleasure.
- Vehicle parts in conforming to European standards.

## **IMPORTANT NOTE**

# **Driver and Passenger**

- This vehicle is designed to carry a maximum of one driver.
- Please use your vehicle without exceeding the load limits written on the vehicle's certificate of conformity.

# **Road Condition**

- This vehicle is designed for use on flat and asphalt roads.
- Do not use the vehicle without reading the entire user manual.
- It is recommended that you read the "Warning, Caution, Note and Safety Precautions" sections carefully.
- After purchasing your vehicle, you should take it to the nearest authorized service center or distributor for maintenance.



#### WARNING

- It is obligatory to comply with the maintenance intervals written in the user manual. Otherwise, your vehicle will be out of warranty conditions. The maintenance intervals for your vehicle and the parts that need to be changed/checked are listed in this user manual.
- These headings are written to protect you from serious personal injury and mechanical damage.



#### **CAUTION**

• These headings are written to protect you from serious personal injury or potential accidents.

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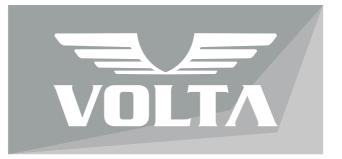
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## **Pre-Ride Instructions**

- Check the condition of all the movable parts.
- Check all rotating parts and add oil if it is missing.
- Check whether the tyres are intact.
- Check the tyre pressures.
- Make sure that all nuts and bolts are tightened adequately.
- Check that the brake cable and other cables are not pinched and are working properly.
- Make sure the throttle is working properly.
- Check all lighting systems.

# **Safe Driving Instructions**

- Follow the pre-ride instructions before starting to use.
- Grasp the grips with both hands while riding.
- Make sure you maintain a safe driving position.
- Practice often, primarily to gain experience.
- Obey the maximum loading conditions specified in the manual.
- Objects moving while driving will change the vehicle's center of gravity and will endanger the driving safety. Take the necessary measures to avoid this situation.
- Avoid acrobatic movements while driving your vehicle.
- Avoid high speeds when turning.
- Wet weather lengthens the braking distance and restricts maneuverability. In such cases, always maintain your low speed.
- Avoid excessive puddles that may occur in rainy weather.
- Do not use under the influence of alcohol and drugs.



#### WARNING

• Do not enter curvy road with your vehicle at high speeds. This can cause your vehicle to rollover and endanger your life.

# **Efficient Driving Instructions**

If the following efficient driving instructions are followed, your vehicle's driving range and efficiency will increase;

- Take your vehicle to service regularly.
- Comply with the maximum load limits in the manual.
- Be careful about using your vehicle in suitable weather and road conditions.
- Check all tyres before riding, that your tyre pressures are appropriate.
- Pay attention to the maximum speed limits.



- 1. Basket
- Headlamp
   Brake Lever
- 4. Indicator
- 5. Throttle Lever
- 6. Ignition
- 7. Battery Box Lock

- 8. Seat
- 9. Rear Carrier Platform
- 10. Motor
- 11. Rear Stand
- 12. Rear Tyre
- 13. Pedal
- 14. Front Tyre



All parts listed in the user manual are given as reference. The manufacturer can make changes without notice.



- 1. Bell
- 2. Indicator Panel
- 3. Throttle Lever
- 4. Ignition



# WARNING

• All parts listed in the user manual are given as reference. The manufacturer can make changes without notice.

# **Actuating**

Insert the ignition key into the ignition switch and place it in the on position. To remove the vehicle from the rear footwell, push the vehicle forwards by pressing the tool on the side. The vehicle will be ready for driving.

# **Acceleration and Deceleration**

• Turn the throttle lever downwards. In this case, your vehicle will move. The speed can be increased or decreased with the throttle. Turn the throttle in direction (a) to increase your speed, or (b) to decrease speed.



# Loading

Do not carry loads that are not suitable for carrying loads on your electric vehicle. Otherwise, these parts will be damaged.

The rear carrying case and front basket can be used to handle light loads.

• Please do not exceed the permissible load limits. Rear transport bar and front basket maximum carrying capacity: 10 kg.

• Please do not carry loads on surfaces that are not suitable for transporting loads on the vehicle. Otherwise, these parts will be damaged.

# **Battery Information**

- Do not remove the batteries.
- Keep batteries away from children.
- Do not combine the anode and cathode of the battery when charging or discharging. Never use any conductor between anode and cathode. It will cause a short circuit.
- Avoid contact with water from your battery.
- Protect the batteries from temperatures of 60 degrees and above.
- Do not expose to physical impacts such as hitting, throwing, dropping.
- Do not tamper with the batteries using cutting, drilling tools.
- If leakage occurs and contact your skin or eye, rinse immediately with plenty of water and go to the nearest health care facility.
- If the battery shows physical changes such as odor, heating, burning, color change, disconnect it immediately from your vehicle and move away.



# 1

#### WARNING

- Store your electric vehicle away from the cold, in your garage if possible. This will extend the life of your battery.
- If you do not use your electric vehicle for a month or more, discharge and recharge the batteries at least once every months. This will help you maintain the battery performance.

# **Braking**

There are braking sensors in the brake lever and foot brakes. In this way, the brakes both provide mechanical braking as well as cut the energy of the motor.

- Grasp the brake lever with your fingers and gently squeeze it towards you.
- Slowly loosen the brake lever to stop braking.
- Avoid sudden and hard braking. Otherwise, your vehicle may slip and cause accidents.
- Be careful when braking on downhill descents.

# Front and Rear Brake

Your vehicle has a drum brake system. For brakes, the brake lever free travel must be 10 to 20 mm. After this distance, the braking process must begin.

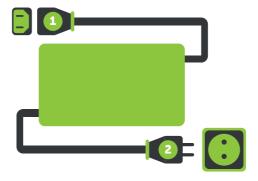




 Brake pads must always be replaced with original products. Poor quality parts can damage other parts of the vehicle. It also affects the performance of your vehicle.

# Charger

- Before its first ride charge the vehicle for 6-8 hours. Please observe the following instructions to vehicle the vehicle;
- Make sure your electric motor is switched off.
- First plug the part of the charger marked "2" into the wall socket.
- Then insert the part of the charger marked "1" into the charging port on your vehicle.
- Arc/spark may occur when installing the charger on the vehicle.
- Two warning strips are located on the charger. The first LED is solid red, indicating it is working, while the other LED turns red during charging and green when the battery is full. If the charger has a red green color, the battery is full. If your charger is a single LED, it turns red during charging and green when charging is finished.
- Wait until the light on the indicator is green.
- After the charging has been completed, remove the plug from the charging port and the charger from the wall socket. Disconnecting the charger from the wall socket will extend the life of the product.





#### WARNING

- Damaged chargers due to voltage differences in your electrical installation may damage your vehicle. These types of faults are not covered by the warranty.
- Plugging the charger into the socket first will protect your vehicle from possible high/low voltage situations.
- Charging at least once a month will extend the life of your battery.
- When the battery is fully charged, disconnect it from the charger.



#### **CAUTION**

- If the battery charge time exceeds the time specified in the manual, please contact the authorized services.
- During the winter, the performance of the battery and range of your vehicle may decrease.
- Use only the original charger specifically designed for your product.
- Your electric motor bike must be switched off when charging.
- Never shake your vehicle when charging.

# **Brake Maintenance**

Brake pads wear out due to the working principle. It should be replaced when it reaches certain safety levels. Inspection of this safety level and change of pads should be done by authorized services. Unreplaced brake pads cause the brake system to work poorly, make noise, and in some cases, break other parts. Brakes should be checked at every service period.

# **Tyre Pressure Check**

Check the pressure levels of your tyres daily. Tyre pressures above and below the norm will affect the vehicle's handling, acceleration, energy consumption and similar performances.

Check your tyres daily for punctures, cuts or any other unusual condition. Also on the rims; crushing, scratching and inclination can cause pressure loss. This type of damage can cause your vehicle to unbalance and vibration. In case of such situations, please visit the nearest official service point and have the damage repaired.

	Size	LCI, Speed Index	Tyre Pressure
	16 - 2.50	30B	230 kPa / 33 psi
VSM	14 - 2.50	30B	230 kPa / 33 psi



#### CAUTION

- If the tyre does not have the correct air pressure, it will wear out more quickly and its life will be shortened, as well
- deflated tyres may cause an accident as they reduce grip.
- In case of very low air pressure, the tyre may come off the rim.
- Your tyres will wear out as you use them. You should change your tyre when your tread depth
  decreases. Depending on the road, climate and usage conditions, your tyre life may be extended
  or shortened. Drivers should check tire pressure and tread depth regularly. Tyres with low tread
  depth will reduce grip, especially on wet surfaces. Minimum tread depth is 1.5 mm for front tyre,
  2.0 mm for rear tyre. Such situations cause accidents.

# **Rear Wheel and Suspension Assembly**

• Lift the vehicle to the rear stand. Push the rear wheel shaft back and forth by hand.

Retighten if there is any movement. Make sure that it is fully tightened and in its full position.

• Ensure that all the nuts holding the front and rear suspension are tightened. If the suspension links are not tightened, some connection points will be exposed to more force than usual. This can cause damage and result in an accident.

# Adjusting the Throttle Handle

- Check that the throttle can move easily.
- The distance from the highest position to the first throttle response should be between 2 and 6 mm. To adjust this, loosen the jam nut, turn the adjuster and tighten it again.

# **Change of Circuit Breaker**

- The vehicle's charging circuit is protected by a 10A glass/blade fuse against outside intervention and the charger's breakdown. However, these fuses are disposable and must be replaced in case of circuit breakage or failure.
   For this:
- Ensure that the vehicle is in the closed position.
- Lift the cover located in the footrest.
- The fuse is located in the fuse box next to the battery.
- Lift the cover of the fuse and remove the integrated fuse.
- Replace with a fuse with a matching specification.

# **A** CAUTION

- Areas where high electric current flows in the vehicle are covered with orange cables. Never
  interfere with these cables except for the authorized services.
- The use of circuit breaker below the specified capacity causes continuous circuit interruption of
  the system, and the use of circuit breaker above the specified capacity causes the deterioration
  of electronic parts due to high currents. This may cause damage to the cables so to the vehicle.
- Do not use high pressure water while washing your vehicle. It will damage your electrical systems.

# Maintenance Interval

- Even if your vehicle runs smoothly, it should be checked at regular intervals
  by going to authorized services. These intervals are specified in detail on the
  next pages of the user manual. Vehicles that have experienced problems
  or have had an accident should be taken directly to the authorized service
  without waiting for the maintenance interval. In such cases, repairs must be
  made with the original parts.
- Maintenance, repair, modification or any change that will increase the
  performance of the vehicle other than the contracted service stations
  approved by the manufacturer will cause the product to be out of warranty.

# Controller / Motor Maintenance

- Your vehicle's electronic control unit (controller) is located under the seat.
   For this reason, make sure that this area does not get water, the cables entering this area are not strained and the protective plastic does not get impacted.
- Do not use the throttle lever and service brake system at the same time in order to prevent deterioration of other parts.

• Slow down when the road surface is bad. Excessive vibrations may cause the cables in the motor and controller to get damaged.

• Do not allow the water level to reach the level of the motor in rainy weather. Otherwise, your motor will break down.

# Cleaning

- It is recommended to clean your electric vehicle with a wet cloth.
- Never lubricate the brake system and tyres.
- Use oil to clean the metal parts of your vehicle. Always use standard cleaning materials when cleaning painted plastic parts.
- Rinse with fabrics after cleaning.

# **First Maintenance**

- 1st and 4th month maintenance is important for your vehicle. After the first use, the motor parts get used to each other and it is recommended to check all the bolts during the first maintenance.
- The reliability of your vehicle depends on the correct first use and first periodic maintenance.

# A

#### CAUTION

- Please stay away from modifications to make your vehicle safe and long-lasting. Modified vehicles will endanger the safety of you and the traffic. Always use approved parts by the manufacturer.
- For your personal safety, turn off the motor before any maintenance.
- If the vehicle has not been used for 1 month or more, check the parts that are likely to corrode, such as tyres and batteries, and start driving.



#### WARNING

 Never use very high pressure water while washing your electric vehicle, high pressure water may cause some parts to absorb water. Parts that receive water may lose their performance and deteriorate

# MOTOR CODE AND VEHICLE IDENTIFICATION NUMBER

Motor code and vehicle identification number are for help our authorized services in order to provide better service to you in case of need for maintenance / repair.

**Motor Code** 



# Vehicle Identification Number





#### WARNING

• Make sure that the motor and chassis numbers on your electric vehicle are the same as those on the certificate of conformity.

# **Periodic Maintenance**

- Periodic maintenance should be done at authorized technical service stations.
- Vehicles that are not regularly maintained (once every 4 months) will be evaluated out of warranty.



# WARRANTY MAINTENANCE CARD PERIODIC MAINTENANCE TABLE

1. моитн	4. моитн	8. моитн	12.моитн	16.моитн	20. моитн
STAMP	STAMP	STAMP	STAMP	STAMP	STAMP
DATE://	DATE://	DATE://	DATE://	DATE://	DATE://
24.моитн	28.MONTH	32.MONTH	<b>36.</b> MONTH	40.моитн	44.моитн
STAMP	STAMP	STAMP	STAMP	STAMP	STAMP
DATE://	DATE://	DATE:/	DATE://	DATE://	DATE://
,					

# **MAINTENANCE AND CONTROL**

ELECTRIC VEHICLES MAINTENANCE TABLE								
		MONTH OF MAINTENANCE * Month or km, whichever comes first.						
PART/ SYSTEM NAME	ACTION TO BE TAKEN	1.Month CONTROL	4.Month (2.000 KM)	8.Month (4.000 KM)	12.Month (6.000 KM)	16.Month (8.000 KM)	20.Month (10.000 KM)	24.Month (12.000 KM)
	Check that the brake cables are not pinched and work properly, adjust if necessary.	•	•	•	•	•	•	•
FRONT AND REAR BRAKE	Replace the brake pads if necessary.							
	Check and adjust the brake lever clearances.		•					
	Check the operation of the brake sensors.		•		•			•
	Check the hydraulic oil lever and any leaks.							
	Check the brake discs.							
Connectors	Make sure all nuts and bolts are adequately tightened.	•						•
B. Atamir	Measure battery voltage, fully charge or replace if necessary.	•			•			•
Battery	Check the terminals are tight.		•		•			
Tyres	Check tyre pressures, tyre damage and tread depth.	•	•		•	•	•	•
Wheels	Check for runout or damage.		•		•		•	
Wheel Bearings	Check that there is no play in the hub and that the wheels turn freely.	•	•	•	•	•	•	•
Handlebar Bearings	Check if the handlebar bearings are worn or loose. Replace if necessary.	•	•	•	•	•	•	•
Front Suspension	Check the spreading. Check the inner tube of the shock absorber for scratches, damage or excessive lubrication.	•	•	•	•	•	•	•
Rear Suspension	Make sure that it does not make any annoying noise while operating and there is no oil leakage.	•	•	•	•	•	•	•
Throttle Lever	Check if the throttle lever is connected and fucntional.	•	•	•	•	•	•	•
Charger and Socket	Check operation and connections.	•	•	•	•	•	•	•
Chain (if equipped)	Check tension and lubricate.		•					

NOTE: Your vehicle should be serviced first at 500 km or 1 month (whichever comes first)

The first maintenance is for control purposes. Your second maintenance after the first one will be done when your vehicle reaches 2000 km. After this maintenance, your every maintenance will be in the form of 2000 and its multiples. The time between any two maintenance should not exceed 4 months. The owner who does not reach the maintenance intervals in more than 4 months should also take the product to the authorized service for maintenance. Vehicles which do not comply with maintenance intervals and kilometers will be out of

-The warranty period starts from the date of delivery of the goods to the owner, in accordance with the warranty certificate regulation, and for motorcycles and ATV vehicles, it is  $\bf 1$  years or  $\bf 30,000$  km (whichever comes first), other vehicles (e-bike, electric skateboard, electric motor bike, etc.). .) for 1 years.







# Storage

- If you are not going to use your electric vehicle for a long time during periods such as winter, you should take some precautions to protect your vehicle from malfunctions and corrosions. It would be better to make some repairs before storage.
- Clean, rinse and dry your electric vehicle. Coating the painted surfaces with protective oil will extend the life of your paint and ensure that it retains its first day's shine.
- Bring the tire pressure of your electric vehicle to the ideal level.
- Put on your vehicle a cover which will be either plastic or non-rubber. Take
  care to store in storage conditions where the air temperature does not
  change much. High temperature change can cause fatigue, deterioration
  and cracking of many parts of your vehicle.

# Get In Use

- Remove the cover from the electric vehicle and clean.
- Start the vehicle after completely following the pre-starting instructions.
- Make the first use in a traffic-free area. After making sure that all parts of your electric vehicle are working correctly and at full performance, drive out to traffic.

# Assembly

The electric vehicle is delivered assembled.

# **TECHNICAL SPECIFICATIONS**

Parameters				
Length	1510 mm			
Width	630 mm			
Height	1060 mm			
Wheelbase	1110 mm			
Weight	52 kg			
Maximum Carrying Capacity	137 kg			
Motor Power	220 W			
Motor Type	BLDC			
Battery Type	VRLA GEL			
Battery Capacity	48 V 14 Ah			
Charger Capacity	48-57V,1.8A +/-0.2A			
Charging Time	6-8 h			
Transmission Type	HUB Motor			
Maximum Speed	25 Km/h			
Energy Consumption	18 Wh/km			
Climbing Ability	17%			
Range*	40 km			
Front Brake System	Drum			
Rear Brake System	Drum			
Number of Seating Positions	1			
Front Tyres				
Size	16x2.50			
Rear Tyre				
Size	14x2.50			

# MANUFACTURER INFORMATION

The service life of your Volta brand vehicle is 10 years and the maximum repair period is 45 days. If you encounter any problems with your vehicle, you can visit our website at www.volta.com.tr and access information about authorized services and spare parts.

You can access all authorized service station information from the Service Information System created by the Ministry

# MANUFACTURING COMPANY

# **VOLTA MOTOR SAN. VE TIC. A.S.**

Selamlar Koyu, Selamlar Mevkii, Gumusova OSB 1. Sk. No:10 Gumusova/DUZCE/TURKEY Tel: 0850 222 28 65 - 0380 731 25 25

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- TUBITAK Technology Free Zone

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MANUFA	CTU	JRER				
Trade Name	Volta Motor Sanayi ve Tic A.Ş.					
Address	Mevl Sk. N	mlar Koyu, Selamlar kii, Gumusova OSB 1. Io:10 Iusova/DUZCE/ KEY	Tubitak MAM Teknoloji Serbest Bölgesi Baris SB. Mh. 5001 Sk. No:3 A/B Gebze/KOCAELI / TURKEY			
Phone	+90 850 222 28 65 +90 850 222 28 65					
Fax	+90 850 222 28 65 +90 850 222 28 65					
PRODUC	Т					
Туре		Electric Vehicle				
Commercial Name		VOLTA, VTA				
Model VSM						
VIN						
Delivery Date	and					
Maximum Re Time	pair	45 working days				
Warranty Period 1 Years		1 Years				
SELLER						
Trade Name						
Address						
Phone						
Fax						
Invoice Date and Number						
Date of Sale						

This section must be filled in completely by the seller. (stamp and signature)

**1.** The warranty period of the vehicle is one year and the warranty covers only the supply of spare parts. Spare parts will be sent if the warranty conditions are met stated in this user manual. In order to benefit from warranty it is necessary to submit Warranty Certificate that must be kept for the duration of the warranty.

2. The use of the product in violation of the terms in the user manual and the resulting malfunction in the product are considered as usage errors and are considered out of

warranty.

- **3.** In the event that the goods are found to be defective, the consumer may use following rights as specified in the Turkish Commercial Law No. 6102 and Protection Consumer Law No. 6502, Article 11;
- a) Withdrawing from the contract by declaring that it is ready to return the sold item,
- **b)** With holding the sold item and requesting a discount from the sales price at the defect rate,
- c) Requesting free repair of the sold item at the seller's expense, unless an excessive expense is required,
- **d)** If possible, he may use one of his optional rights to request that the sold product be replaced with a non-defective one.
- **4.** Since the invoice will be taken into account in case of disputes that may arise within the warranty period, it is obligatory to submit the approved Warranty Certificate and invoice.
- **5.** The warranty will be voided if any damage is done on the invoice and warranty document, when the original serial number on the vehicle is removed or if it is determined that it has been destroyed.
- 7. The periodic maintenance of the vehicles should be done by authorized services at the intervals specified in the user manual delivered with the vehicle. Vehicles that are not serviced on time will be out of warranty. The responsibility in this regard belongs to the consumer who owns the vehicle.
- **8.** The warranty given by our company does not cover the faults that may arise from the use of the vehicle in question for other than its purposes or in abnormal conditions, and the below-mentioned faults are also out of warranty;
- Failures caused by adding parts or parts not produced or sold by Volta Motor to the vehicle,
- Water intake of parts as a result of washing with high-pressure washing,
- Bending, breakage or deterioration of parts such as axle, differential, gearbox, motor and wheel as a result of using the vehicle above the maximum carrying capacity specified in the technical documents,
- Malfunctions arising from modifications made without the written approval of Volta Motor.
- Wearing, aging and loss of performance of battery, pad, tyre, belt and similar parts as a result of use,
- Contact of electronic components with water.
- Loading the shock absorber and chassis fasteners above the carrying capacity written in the user manual or breaking as a result of hard impact, bending,
- Damages and malfunctions that may occur as a result of disasters such as fire, flood, flooding and lightning,
- Batteries are products with a shelf life. Batteries that have been kept unused for more than 90 days (by the dealer or the end user),
- Damages that may occur during, loading, unloading and transportation of the vehicle after delivery to the user.
- **9.** No one other than the consumer whose identity is stated on the Invoice and Warranty Certificate of the vehicle can claim any right or compensation.
- **10.** The consumer may apply to the Consumer Arbitration Committee or the Consumer Court in the place of residence or the consumer transaction, in case of disputes that may arise regarding the use of his rights arising from the warranty.

# **NOTES**



ENGINEERED BY ELECTRIC