

AVADAR E-BIKE OWNER'S MANUAL



FOREWORD

The following operation manual is a guide to assist you. This manual is not a complete document on all aspects for the maintenance and repair of your bike. The electric bicycle you have purchased is a complex object . Avadar E-bike recommends that you consult an pedelec repair specialist if you have concerns as to your ability to assemble, repair, or maintain this product.

More details please check our website www.avadar.com.

It is important for you to understand the electric bike. By reading this manual completely before the first ride, one will get better performance and enjoyment from this product; also it's helpful to extend the life of the electric bicycle.

This operational manual should remain an integral part of the product. Changes or any copy actions in pictures, specifications and descriptions are strictly prohibited.

CONTENTS

Safety.....	2
BICYCLE INFO.....	5
BATTERY Charging and Removal and Installation	6
Electric Powered Pedal Assist Motor	11
TFT screen instructions	12
Installation Guide	19
Saddle	20
Handlebar	21
Quick release	23
Head light	24
Pedals	25
Variable speed control	27
Select accessories	28
New Owner.....	29

SAFETY

This booklet describes assembly and safe operation of your electric bicycle. Pictures are for reference only and may show the similar component from another model.

- **Please Read The Entire Users Manual Before Riding Your New Electric Bicycle**
- ***Always Check Bike. Brakes. Tires and Screws/Nuts for Tightness Before riding.***
- **Recharge your electric bike before your first ride and after any long distance operation.**

Things you must know before your first ride

Please read this manual carefully before operating your e-bike in order to familiarize yourself with the bike and its different functions.

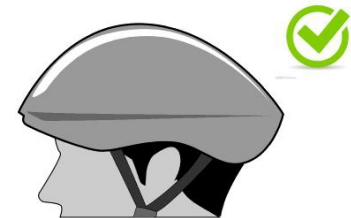
Please learn and observe all the road rules while riding your e-bike on public roads, including ALWAYS wearing an approved helmet.

The correct helmet should:

Be comfortable to the rider be of lightweight have good ventilation for the head fit snugly cover the forehead.

It is your responsibility to familiarize yourself with the laws of the state where you ride and to comply with bicycle laws.

Young children, pregnant women and any persons with vision, balance, or other problems that would prevent them from riding a bicycle should not use the pedelec.



The e-bikes are not designed for two riders. Please ensure only one person at a time is riding the e-bike.

E-bikes are for on road or improved trail use only and should not be used for riding rough trails. Damage to the bike may occur if used off road.

Do not operate your electric bike after consuming any amount of alcohol or taking any drugs.



All photos are for general reference only and may differ slightly for each model of pedelec.

ATTENTION:

NEVER carry a passenger on the Electric Bike.

NEVER modify the Electric Bike with unapproved accessories.

NEVER ride through deep water.

NEVER perform wheelies, jump trick stunts.

AVOID riding in the rain for long period soft time.

AVOID water contact to motor and dielectric lines.

ALWAYS keep both hands on handlebars.

ALWAYS apply brakes lightly when riding on rocks or loose surfaces.

ALWAYS use caution when going through puddles.

ALWAYS inspect the Electric Bike before each ride to insure a safe ride.

BICYCLE INFO

Wheel size: 27.5 inch

WEIGHT: 25 KG

LOAD: 100 KG

Battery range: 60 KM - 120 KM

Bicycle Parts

- 1: display
- 2: handlebar
- 3: fork
- 4: front light
- 5: tire
- 6: rim
- 7: spoke
- 8: battery
- 9: saddle
- 10: seat tube
- 11: motor
- 12: crank
- 13: pedal
- 14: brake
- 15: chain



BATTERY

Capacity: 10Ah

Voltage: 36V

Charging Time: 4-6 hours

Some instructions on battery maintenance and charging

1. Please charge the battery for 4-6 hours after its energy is consumed for 50%-70% of its total energy , in this way, the battery life will be longer. If you leave the battery pack in your stock in less energy condition, it will sleep to die easy. So please charge the battery pack full after each long distance ride. Do not charge the battery for a long time (that is “exceeds 10 hours”) in summer; in case that the battery will be calorifacient and broken.

2. Recharging battery once a month during the period of storage

3. Charging temperature:0°C~45°C

4. Battery pack might not been fully charged when temperature is over low or over high.

When the battery is charged, its temperature may become a little higher, it is normal under the temperature of 50°C.If the charger indicator is useless when the battery is full charged or the battery is very hot (that exceeds 50°C), please come to the seller to find maintenance at once.

5. Do not make the charger in the rear box if there is one box attached; and the charger should be far away from water. The impact and shake should be at the lowest degree when the battery is moved.
6. Each special designed charger is provided for each battery pack. Do not use other type of charger for fear of burning out battery and causing danger.
7. Battery storage conditions: cleanliness, coolness, dryness and airiness, temperature 0°C~45°C.No fire, water-logging and mixing the battery together with corrosive substance during battery shipping and storage.
8. Please let the key on the head of the battery case be "on" when you charge it.
9. Please sure that there is no short-circuit in your wall socket for fear of burning out battery and causing danger.
10. Please don't pull out the power key when you are riding the bike forward under high speed.



Battery Charging

WARNING! Only charge your battery with the charger supplied with your e bike. The charger is set to 100/240V. Using any other charger or voltage will void your warranty and could cause damage or cause injury.

Battery Charging on or off of Bicycle Frame

- 1. There is a charging port on the bike frame (Fig.1), you can leave the battery in the bike and charge directly.**
- 2. There is also a charging port on battery as shown in (Fig. 2) you can remove the battery from the bike and charge in another location. Make sure you charge battery in a well ventilated location.**

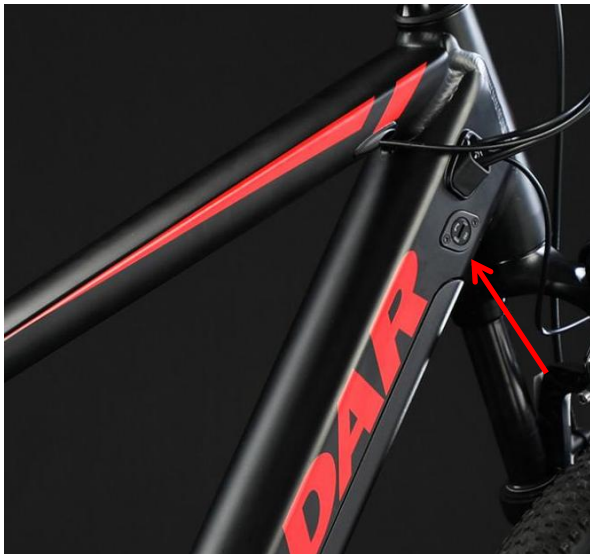


Fig.1



Fig.2

Battery Removal and Installation!



WARNING!

As with all electric appliances you must operate your E-Ride battery system with care. Do not store your charger or battery in any place where they could get wet or be subject to high heat. The storage area should be well ventilated.

Security: You are supplied with 2 keys to secure your battery to your bike. It is advisable to separate the keys and store one in a safe place.

You can also unlock your battery, enabling you to remove it for security or to charge the battery when removed from the bike.

Battery Removal:

Step 1: Insert the key into battery frame lock. open left insurance (push up), Turn key to the left clockwise, 180 degrees to "OPEN" battery frame lock. The battery is now ready to be removed.

Step 2: Remove the battery from the frame by pulling gently from the top .

Step 3: Remove key and keep in safe place.

Battery Installation:

Step 1: Insert the key into battery frame lock. Turn key to the right clockwise, 180 degrees to "CLOSE" battery frame lock. The battery is now ready to install.

Step 2: Insert the battery, bottom edge first and press into the frame. Make sure that battery is completely engaged and is sitting flush in the frame. And Close the left insurance (push down).

Step 3: Remove key and keep in safe place.

For more battery disassembly video, please log on to the web page: <https://avadar.com/product-support/>

Electric Powered Pedal Assist Motor

Model :T210

Rated Power :250 Watts

Rated Voltage: 36 Volts



Rules of Electric Motor

- 1. Do not soak electric motor in water, this can cause damage to electric motor and void the factory warranty;**
- 2. Do not open the electric motor yourself, this will void the factory warranty;**
- 3. Only use controller and battery provided with this electric motor;**
- 4. Do not over-power the motor, e.g. using a rated 48V battery;**
- 5. Do not lubricate the electric motor.**

TFT screen instructions



SPECIFICATION



6.1 Speed display: Km/h or MPH.

6.2 Battery display: Voltage data and display model is optional.

6.3 Level display: 0-9 levels, P means 6Km/h.

6.4 Mileage display: Display mileage accumulation.

7.Functional Description



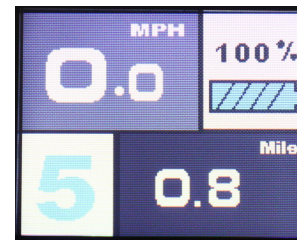
7.1 Power On/Off

Press and hold power button for 1 second, it can turn on/off the display. The Display will automatically shut down when there is no operate & ride for X minutes (X could be 0~9).

7.2 Assist level operating

Short press UP/DOWN button can change the assist level. Top assist level is 5,0 for neutral. Level quantities can be adjusted according

to the customer's requirements.

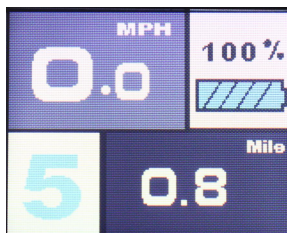


The screen display of the PAS level adjust

7.3 Headlight/Display model change

Press and hold UP button for 1 second, the headlight will be open (controller support is needed) and change the daytime/night model.

Press and hold UP button for 1 second again, lighting will be closed and change the display model.



Daytime model



Night model

7.4 Walking mode (6km)

Pressing and holding DOWN button for 1 seconds can get into walking mode, then the display will show P, when release the button, it will be out of the mode.



7.5 Information

Press power button for 1 seconds can get into information menu, it will show Odometer/Trip distance, and Riding time.



Information menu

8. MENU Parameter setting

In the state of power on, press the power button twice (time interval must be within 0.3S), the system will enter the menu parameter setting state, in this state, users can set the parameters, press power button twice again to quit setting state (time interval must be within 0.3S).

*Display will quit power the menu automatically when there is no operation for 30 seconds, In the riding state (speed is more than 0), entering setting state is not allowed, when riding in the menu state (speed is not 0), it will quit menu setting state.in the advanced setup interface, when you press power switch, it's not able to quit menu.

8.1 Brightness

Press button to enter the setting menu, adjusting the brightness 1-5 by pressing UP/DOWN button, 1 is the darkness, 5 is the brightness.



8.2 System

Press UP/DOWN button can change different function, entry into default by pressing power Button, press UP/DOWN button again will change content, pressing power button returns to previous menu.

Default and functions:

Unit system → Metric/Imperial

Power system → 24V/36V/48V/52V

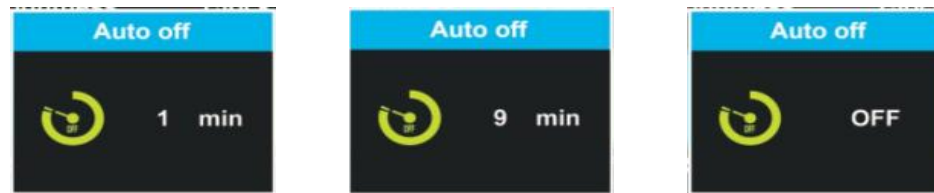
Power indicate → Percent/Voltage

Auto assist → ON/OFF

After finish setting, choose EXIT, returns to previous menu.

8.3 Auto off

Press UP/DOWN button to change the auto power off time, from 1 to 9, the number represent time (minutes) to shutdown, default value is 5 minutes.



8.4 Wheel

Press UP/DOWN can change the wheel setting, optional wheel diameter is 16/18/20/22/24/26/27/27.5/28/29/30/31/32/34 inch, 51cm~255cm represent wheel circumference (this needs protocol support).



Note: This system speed limit 20M and factory has been set all the parameters, please do not change the instrument parameters and actual riding effect deviation, such as setting can not be restored please contact authorized dealers or official website customer service!

8.5 Error Code define

Error Code define	Reasons	Notes
21H	Current Anomaly: Controller failure or short circuit	Need to check the wiring or replace the controller
23H	Motor out of phase: Motor or controller out of order	Need to replace motor or controller
24H	Motor Houle abnormal: Motor failure	Need to replace motor
26H	Under voltage: Low battery capacity	The battery needs recharging
30H	Abnormal Communication: Abnormal communication of display or controller	Need to replace display or controller

Installation Guide

1. The car has been thoroughly tested and tested before it leaves the factory. The front wheels, stand, seat, and pedals are removed or released for ease of transportation.
2. The following is the amount of torque required to reinstall or tighten.

Name of clamp bolts	Standard torque /N.m
Handle barstem and fork clamp bolt	23-25 N.M
Sunflower fixing bolt	18-20 N.M
Seat post	/
Pedal	6-8 N.M
Head light	4-6 N.M
Quick release	/

2. Installation instructions for saddle



1 Insert the seat post into bicycle frame tube with small Swaged end up.

NOTE: Seat post must be inserted at least to the minimum

insertion mark stamped on the lower part of the post. If no minimum insertion mark can be found.

2. Tighten the seat post clamp nut securely. Recommended torque is 120 in./lbs,(13.6 Nm).

3. Loosen saddle damp nuts so saddle camp will fit down fully onto top swaged end of seat post.

4. Tighten seat post bolt. Recommended torque is 150 in/lbs,(17 Nm).

3.Installation instructions for Handlebar



STEP 1



STEP 2

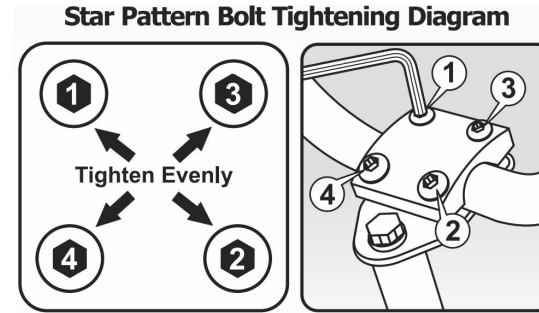


Fig.2

STEP1,remove the four allen head bolts of the handlebar clamp, STEP2 ,put the handlebar in a comfortable position for the rider.

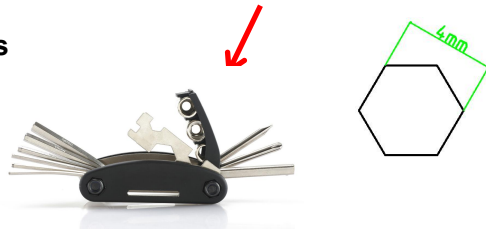
Warning:if the handlebar clamp is not tight enough,the handlebar can slip in the stem.This cause loss of control.Tgihten the four allen head bolts of the handlebar clamp.Tighten each bolt in the order as shown in the Star Pattern Bolt Tightening Diagram.Tighten bolts(4/3/2/1) evenly till full tight.

Test your handlebar.

Hold your bicycle stationary and try to move the ends of the handlebar forward or backward. If the handlebar moves, loosen bolts of handlebar clamps. Put the handlebar in the correct position. Tighten the four allen head bolts of the handlebar clamp as shown in the Fig.2. Make sure to tighten all allen bolts equally in a star pattern. Do it again until the handlebar does not move.

For more disassembly video, please log on to the web page: <https://avadar.com/product-support/>

Use tools: Combination tools



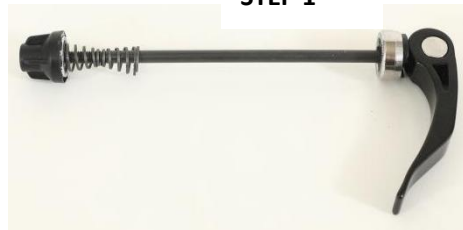
4. Installation instructions for quick release



STEP 2



STEP 1



STEP 3

The product is assembled as follows:

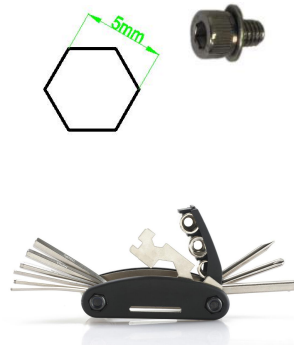
Step 1: Insert the quick disassembly rod into the front wheel set along the horizontal direction, so that the quick disassembly rod itself enters the wheel set completely, at the same time, notice that the brake disc must be exactly in the middle of the Brake Pad;

Step 2: Tighten the lock nut on the right quick clockwise direction and ensure that the left quick release wrench can be pulled;

step 3: Adjust the quick insert nut to tighten, so that the left quick release wrench can be pressed and tightened to complete.

NOTE:Make sure the quick release is tightened totally.

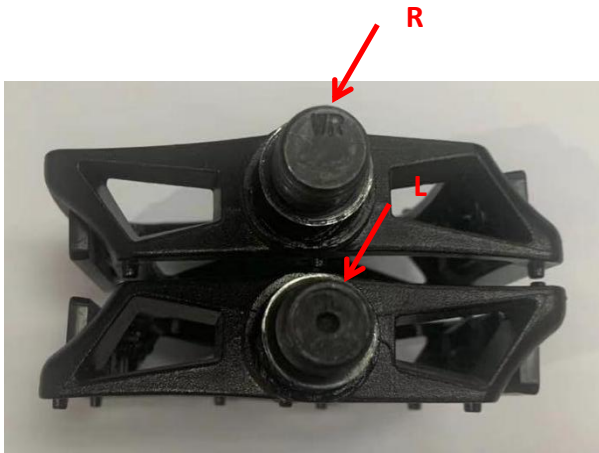
6. Installation instructions for head light



Remove the screws from the bicycle left clockwise with 5mm Hexagon socket wrench (Fig2) ,hand-lock the screws through the head light bracket to the frame.Lock the head light using a 5mm hexagon right clockwise (4-6N.m) and keep the head light level and reflector vertical.

For more battery disassembly video, please log on to the web page:<https://avadar.com/product-support/>

7. Installation instructions for pedals



Left pedal



Right pedal

All pedals have "L" or "R" stamped on the threaded spindle of each pedal.

Use tools: Combination tools



1. Thread the pedal marked "R" clockwise into the right or chain wheel side of the crank arm.

2. Thread the pedal marked "L" counter-clockwise into the left side of the crank arm.

NOTE: Hand thread pedals into position without use of a wrench to ensure threads are not crossed. Damage to crank arm Side of Pedal will result from crossed threads. When tightening with a Left Pedal wrench, make sure each spindle is firmly seated against the crank arm. If jaws of wrench are too thick, they may turn counter clockwise prevent proper tightening of pedal spindle against crank arm.

5.Variable speed control



Using Shimano 2 * 8 speed, medium to 32/42 T gear change through the left and right sides of the handlebar speed change (left to medium change, right to rear change)

Flat road or road riding: It is recommended that the front gear change to 42T chainwheel, after the gear disc to 12-32T chainwheel

Climbing ride: It is recommended that the front gear disc to 32T chainwheel, after the gear disc to 21-32T chainwheel

WARNING!

If there is any damage to the bicycle during disassembly or cycling, do not remove it by yourself, please contact the authorized dealer or contact the customer service on the official website!

Select accessories



Shelf tie



hat



Kettle and kettle support

Owner's Name:
Address:
Postal code:
Contact the phone:
Product model:
Date purchased:
Rack No.:
Motor No.:
Battery number:

warranty card		
date	service action log	serviceman

NOTE:
