

Introduction

Dear Customer

Thank you for choosing **Solax-S3021 foldable scooter** !

Please read this manual carefully before operating **Solax-S3021** because this manual will help you to operate **Solax-S3021** smoothly. If you can't understand all of the content completely or you need the assistance, please contact the scooter dealer of Solax-3021 or Dongguan Prestige Sporting Goods Co. Ltd.

TEL: 86-769-88918228, E-mail: alex@solaxtech.com.

This manual covers Solax-S3021's main structure characteristics, main components, function of each part, safety requirements and instructions, battery instructions, matters need attention, the methods of dealing with emergencies, and scooter's maintenance.

The following symbols used in this manual are to indicate warning and matters need to pay attention; therefore, it is important for you to fully understand and master the content.

WARNING: Failure to note the warnings from this manual will cause your personal injury.

NOTIFICATION: Failure to note the notification from this manual will damage your **Solax-S3021**.

All of the information and pictures in this manual are subject to the factory's products (FIG 1) and only for customer reference. The product will continue to be improved and modified without prior notice. Please do understand and support us.



(FIG 1-S2091-scooter)

Finally, we believe that Solax-S3021 will lead you to the comfortable, convenient, and wonderful life.

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I. S3021 Feature Guide

Solax-S3021 is mainly composed of the following parts: Front and rear frame, Control panel, Front/Rear cover, Front wheels, Rear wheels, Handle switch, Handle, Drawtube, Release switch, Foldable seat, Seat supporting frame, Foldable armrest, armrest supporting frame, Footboard, Carry handle, Battery, Charger, Motor set.(FIG2)

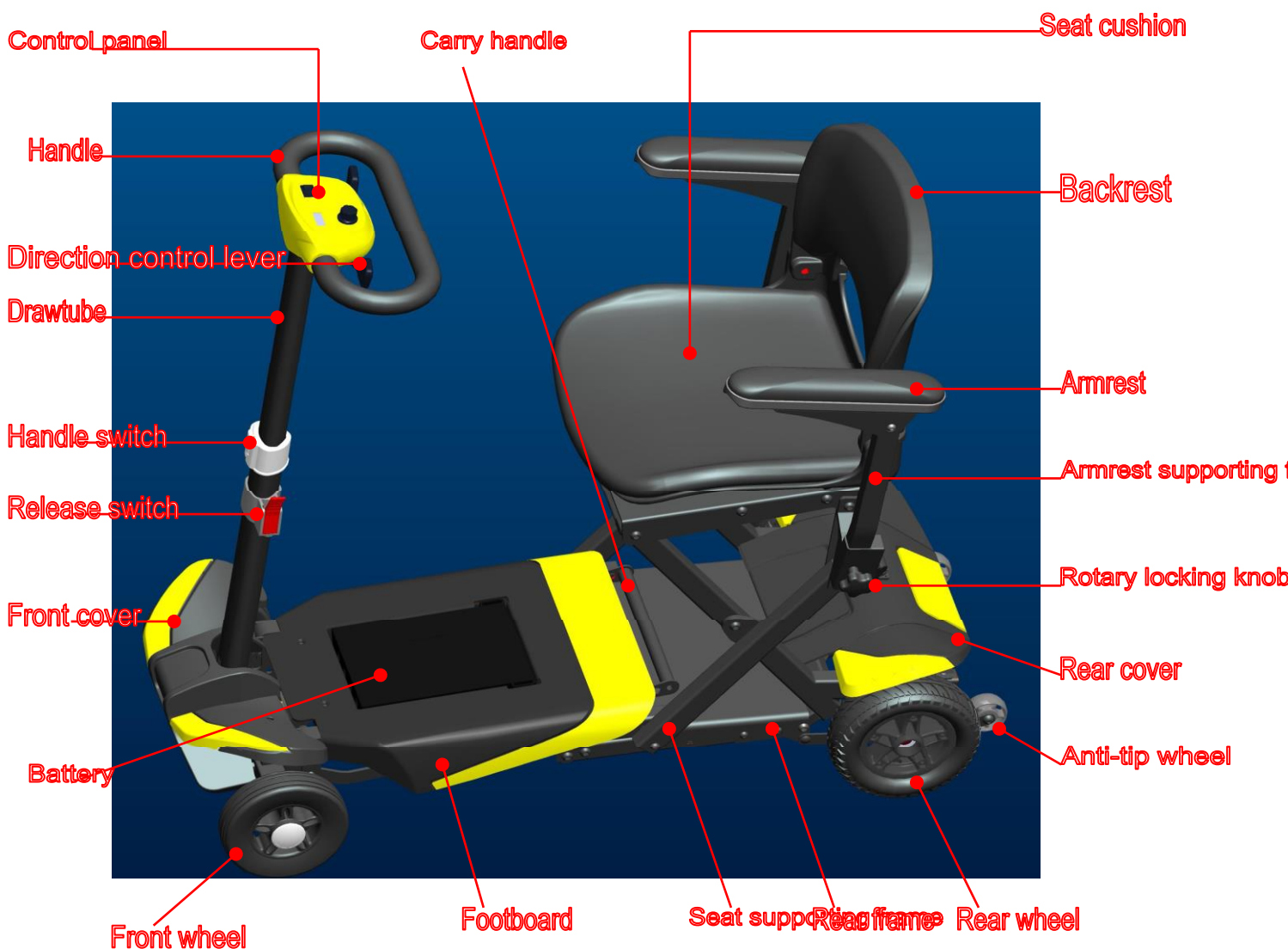


FIG2

The overall design of **Solax-S3021** scooter is full of modern recreational flavor. It's safe and comfortable, easy operation, convenient to be folded and carried, lightweight and steady. It mainly has the following characteristics:

1. The frame is consisting of advanced aluminum alloy with features of light, strong and durable.
2. It can be folded and unfolded without any tool used. Easy operation.
3. Seat, front and rear frames can be folded, which make it easy to carry.
4. It can be put in the trunk or take it with you when taking the public transportation for its light weight and small size
5. Battery is easy to load and unload, and also convenient for user to carry.
6. Comfortable—with the ergonomic seat and the handle tube can be adjusted to a comfortable height and gradient.
7. 6 inch solid front tires and 7 inch solid rear tires.
8. Start smoothly and brake flexible and stable
9. Body shape, the stream is beautiful and elegant, surface is smooth and bright, environmental protection and durable.

In conclusion, **Solax-S3021** is a unique scooter, for middle age, elderly, disabled, walking difficulties, weak and lack endurance elder people, cripple or physically disabled people. The scooter is a trustworthy product. It also used for theme park, amusement park, zoo, museum etc. , meanwhile it is ideal ride instead of walking, shopping tools for middle aged and elderly people. (FIG 3)

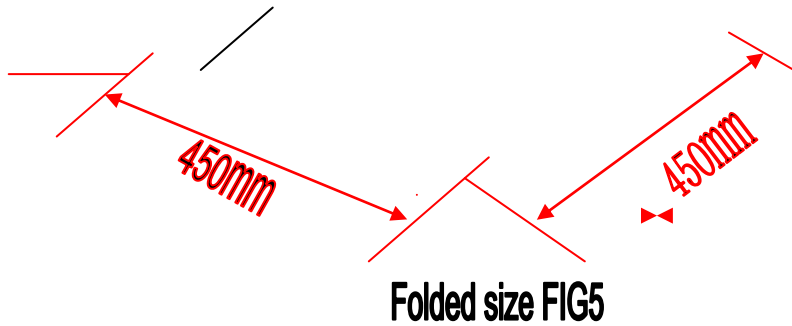


FIG3

2. Product specifications and relevant Parameters



570mm



Specifications

Model:	S3021 Automatic folding scooter
Overall Length:	0.93m (36.9in)
Overall Width:	0.45m (18.1in)
Tires (Solid wheels):	Tire Size Front 6 "x 1.5" Tire Size Rear 7 "x 2.36 "
Maximum Speed:	6km/h (3.7mph)
Safe Gradient/ Maximum Gradient	0-15°
Range Up To:	20km (13.7mile)
Turning Circle:	1.4m (55in)
Weight (without battery pack):	24kg (53ibs)
Color:	Red, yellow, blue
Brake:	Intelligent, regenerative, and

	electromagnetic
Drive system:	S-drive 45A
Handlebar:	PU foam
Maximum weight capacity:	136kg (300lbs)
Seat Width:	0.43m (17in)
Seat Height (from the ground):	0.56m (22in)
Battery :	Power Type/ Lithium battery
Motor:	24V 120W
Battery Charger:	29.4V 2A

3. Main Parts and Relevant Function

Control panel

The control panel is an operating controlling component, which is mainly to control the connecting and cutting of the power, moving forward and backward as well as show the battery level. It consists of power switch (rocker switch), speed control switch, direction control lever, battery condition indicator, control panel, top and bottom cover, etc. (FIG 5)

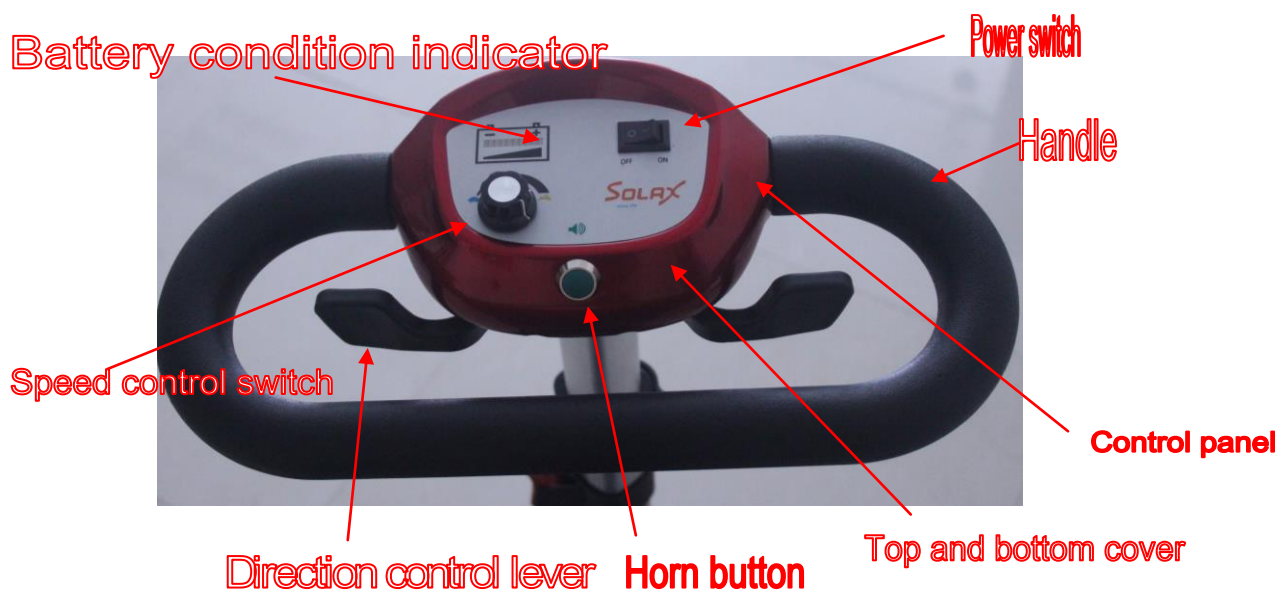


FIG 6

NOTIFICATION: Do not put the control panel in the humid area. If the control panel has been affected by moisture before using, please ensure it is dry when you operate it.

Power Switch (In different regions, the power switch design is divided into the key switch and rocker switch)

1. Rocker switch (FIG 7)

Turn on the power before driving



[-] Power on, can drive.

[0] Power off, can't drive

2. Key switch (FIG 8)

Turn the key switch clockwise to ON, can drive.

- Turn the key switch anticlockwise to OFF, can't drive

Please turn the power off when stop driving.

FIG 7



FIG 8

WARNING: If the key is removed during use or press the ship type switch to "0". The electromagnetic brake will be locked and your scooter will stop suddenly.

Speed controller (FIG 9)

The speed controller is used for controlling the speed when driving. You can set the speed from 0Km/h to 6Km/h. When you adjust the knob to the left end (the tortoise), it's the minimum speed; when you adjust the knob to the right end (the rabbit), it's the maximum speed.

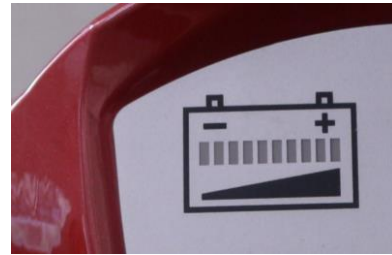
Warning: when you turning or driving backward, please do not adjust the speed to the maximum speed.



Power indicator (FIG 10)

Switch the rocker switch to 「-」, the power indicator will show the power condition.

Green means the power is enough; yellow means the power is weak; red means it needs recharging.



Direction control lever (FIG 11)

The direction control lever is used to control the forward and backward.

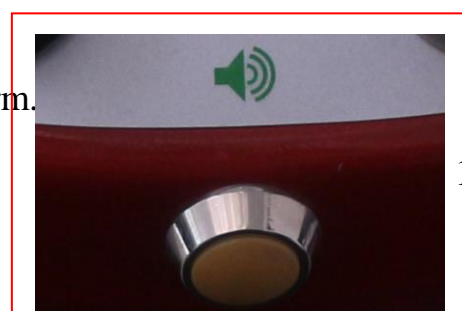
- Hold the rubber handlebar with both hands.
- Pull the control lever on the right, the scooter will go forward.
- Pull the control lever on the left, the scooter will go backward.
- When the scooter moves backward, the horn will start the beeping.
- The control lever will return to the center position when released and the brake will be locked.



FIG 11

Horn button (FIG 12)

When you press the button, it will sound the beeping alarm.



In order to prevent accidents and injury, please use it in time.

Telescopic handle

Open the handle switch outward (FIG 13) and make it in loose state. Then the handle drawtube will draw back down (FIG 13). Buckle up the handle switch after the handle drawtube draw back in place (FIG 14).



图13



图14

Controller

Controller is fixed in the rear cover and it receives the signal from the control panel and transfers the signal to motor, brake and bulb.

Notice: Do not store the controller in the moisture environment. If the controller has been affected by moisture, make sure to dry it before operation.

Brake

S3021 install the electromagnetic brake and it can not brake by manual. You can raise the headstock to move the scooter or pull the scooter after fold.

Motor/Transmission component

Motor/ Transmission component as a mechanical and electrical part will convert the electrical energy to rear wheel drive.

Remote control (FIG 15)



FIG 15

Remote control operation:

S3021 folding operation

- 1) Press B button for 2seconds and release
- 2) (FIG 16-17, scooter will folding automatic)
- 3) You will hear "creak" after folding totally.



FIG 16

FIG 17



S3021 unfolding operation

Press A button for 2 seconds and release

Unfolding totally (FIG 18)



FIG 18

四、Folding and unfolding

When the remote control is broken or damage the function, you can operate as following:

S3021 folding and unfolding operation: (FIG 19-22)

FIG 19



Release switch

FIG 20



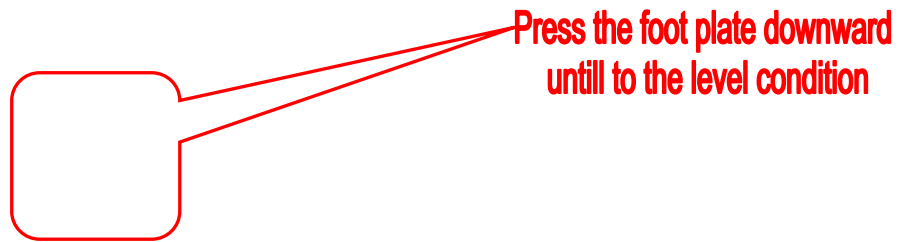
Use your right hand press the release switch outward (Open the release switch)

FIG 21



1. Use one hand to hold the handle tube, other hand hold the seat margin
2. Both hands pull open outward

FIG 22



Note: 1. Do not put your hand in the sacro-iliac joints in case by task.

2. Do not unfold the scooter before open the release switch.

3021 folding operation:

Hold the handle tube and pull upward (FIG 24), then the front and rear frame will draw close to the middle fold (FIG 25). After the current frame collapse to a certain degree and push inside with your hands until the front and rear frame completely folded in place (one hand press the frame margin, the other hand press the seat cushion) (FIG 26)

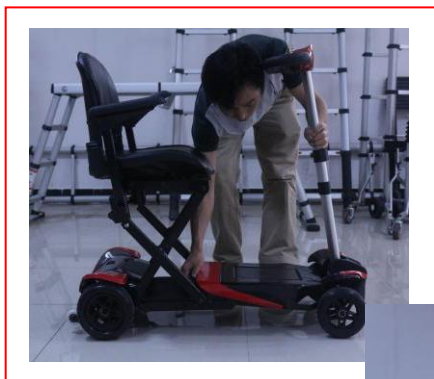


FIG 24

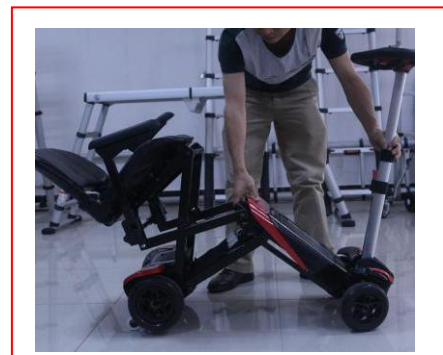


FIG 25



FIG 26

Warning: You will hear the “ click” after the scooter folding totally.

五、 Safety requirements

Driving Surface

SOLAX-S3021 has the best stability under the normal driving conditions(such as dry level ground with the constituent concrete or asphalt). However. It may meet other grounds, such as grassland, gravel and etc. So there are some requirements before riding the scooter :

Please read this manual before driving the scooter.

- Make sure about your physical condition before driving the scooter.
- Solax scooter can be used in the park and grass safely.
- Try to avoid driving in the loose gravel, covered soil and sandstone.
- Do not drive the scooter if you can't tell the condition of the roads.
- SOLAX scooter can stride over an obstacle with a certain height, but you must minimize the speed and slowly drive over the obstacle(FIG 27)

Load capacity	Height
------------------	--------

<136Kg

60mm



Warning: Do not exceed the specify climbing angle(0-15°).Please do follow the manual instruction before operation.

Safety precautions

- Do not operate your scooter before you fully read and understand this manual.
- Do not carry passengers or drunk driving when you drive the scooter.
- Ensure the seat is fixed and fastened.
- Please slow down when driving on the uneven or soft ground.
- Please slow down before turning.
- Do not park on slopes.
- Approach slope end, slopes, raised group and unprotected edge zone(such as curbside, vestibule and stairs ets.) with extra care.
- Changing initial setting or refitting your scooter is forbidden.
- Please be careful when driving in the busy steets, market or shopping center; driving in the unsafe zone. Prohibited area is forbidden. Please consult local authorities about the traffic rules for scooters.
- Hold the handle with both hands and put both feet on the footboard when driving.
- Using your scooter as a seat on moving vehicle is forbidden.

- Please ensure the safety of the batteries when your scooter is on the other vehicles for transportation.
- Climbing or driving along the edges of roads is forbidden, otherwise, the scooter will be damaged permanently.
- Do not exceed the maximum tolerance gradient when driving.
- Do not carry passengers or exceed the maximum weight capacity.
- Do not reverse on uneven slopes or uneven ground; be careful when passing over slopes.

Warning: The battery should be protected in freezing temperature! Do not charge the frozen battery. Otherwise, it will damage the battery and may cause personal injury.

Warning: Do not drive on freezing, slippery or salty ground, otherwise, you may suffer accident and personal injury.

六、 Battery and battery charging

This scooter is designed with one maintenance free of power Li-polymer battery with a long usage time as well as a long useful life. Charging with a 29.4V/2AR charger makes it easy to use.

- Charge the battery before the first operation. Please charge the battery every 3 months.
- If you don't use your scooter for a long time, please take off after charging full. Do not put in the scooter.

The guide for charging steps:

1. Close (the ship stype switch or key switch) and place the charger. Then switch off its power and open the bottom charger cap and insert the plug into the charge socket. FIG-28



CLOSE the SHIP STYPE SWITCH OR KEY SWITCH



Then open the rear charging socket and insert the plug

FIG 28

Warning: Match the charger socket and charger plug properly.

Insert one end of the AC power wire into the socket of household power then insert the other plug into the socket of the charger.(FIG 29) Verify the connection before you turn on the main power switch. Red light indicates power on, orange light indicates on charging and green light means fully charged.



FIG 29

3. Turn off the power switch first when the battery is fully charged. Then take out the DC charging connector before you take out the AC input power socket.

Warning: You must turn off the power switch once the battery is fully charged and then take out the plug otherwise you may shorten the working life of the battery.

4. If the red light is off when the power on, please check whether the power plug is properly inserted.
5. Normally allows 8-14 hours for charging.

Note: The scooter has a self-locking function to prevent driving when you charge the battery.

Guide to safe and lasting battery

How does charger work?

When the battery voltage is low, the battery charger outputs a large current to charge the battery. When battery voltage is close to full, the battery charger outputs a small current. When battery is full, the battery charger will output very little current which is almost zero. Therefore, the battery will continually charge after connecting the charge, but will not overcharge. It is better to charge no more than 24 hours.

How does the indicator light(LED) in charger display.

There are two LED indicator lights in the charger. The red indicator light is the power indicator light. Regarding the other one, it is orange when charging and it will become green when the battery is charged fully. The red one will sometimes still on after pulling the charger plug out from the power socket; then you may think there is some thing wrong with the charger, however, in fact, it needs seconds for the red light to snuff out when the battery voltage is up to 26V.

Other chargers can be used?

In order to charge safely and efficiently, we suggest using the charger supplied by original manufacturer.

How often should charge the battery?

The charge time depend on the following elements:

- Driving scooter all day.
- Driving scooter occasionally for few times.

Following information will offer the safe and reliable charge method.

- If you driving scooter everyday, you should charge it after using. So that it is convenient for you to use it next day. Charging of the battery should be vary from 8 up to 12 hours.
- If driving scooter once a week, then charge battery once a week. Charging the battery should be vary from 12 up to 14 hours.
- Make sure your battery fully charged and saturation.

How can you get the maximum operating distance?

Some driving conditions such as hills, sidewalk gaps, uneven and soft surface, turning and against the wind will affect the driving distance and time after per battery charging.

Several methods for obtaining the maximum driving distance

- Fully charged your battery before driving it.
- Avoid hills, gaps, macadam and soft surface.
- Only to carry the necessities and reduce the luggage weight.
- Keep a constant speed.
- Avoid intermittent driving.

Which types and specifications of the battery should be used?

We recommend the Li-polymer battery which S2061 has fitted with.

Warning: Please do not dismantle the Li-polymer battery and do not add water.

Failure to observe this note will invalidate the warranty, and damage the battery and scooter.

Why the power of the new battery is weak?

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

More importantly, deep-cycle battery can only get high performance after using for several times of charging-discharging cycles.

Please follow the steps to improve the battery performance as below:

1. New battery must be fully charged before using and it can reach 88% capacity.
2. Please drive in the safe and the familiar area. Low speed is recommended at the first time. Do not travel too far until you are familiar with the operation and the battery should be fully charged.
3. Please give the battery another fully charging after operated it in the second times and this will make the battery up to 90% capacity.
4. The battery capacity will top to 100% and extend the driving time after four to five charging and discharging cycles.

How to ensure the battery life?

A fully charged battery will provide good performance and extend battery life, so keep the battery full charged whenever possible. It will affect performance and shorten battery life if you over discharging, seldom charging or do not fully charge.

How to store scooter and battery?

If you don't operate your scooter, please follow the instructions:

- Charge your battery fully before you store it.
- Disconnect the battery from controller attachment joint.
- Store your scooter in a dry and warm place.
- Avoid to store scooter in temperature variation place.

Warning: If battery was frost, it should be kept warming for several days before charging.

If you will leave the scooter for a long time, please lay a plate under the footboard to support scooter. It can reduce stains of tires when wheels pressing on the ground.

七、操作方法

VII. Operational Instruction

Inspection before operating:

- Please inspect the battery is fully charged or not. (Refers to “V、 Battery and Battery Charging)
- Please make sure you know the route well. (Including the crowd, animal, obstacle)
- Avoid the un-flat and slope road condition,.
 - Check if the key is inserted into the key switch or the end of rocker switch is pressed. (Refers to “III、 Function Introduction”)
- Make sure your hands are steering the handle bar. (Refers to “III、 Function Introduction”)
- Please check the horn is working or not.

- Please check the tiller quick release is locked or not.

Driving

Please follow the instructions after you choose your route:

- Please unfold the scooter fully according to the instruction (picture19-23) after you read the manual.
- Unfold the seat to right position, and adjust the tiller for the suitable position, then lock it.
- Please seat on the seat and grasp the handlebars, then turn on the power switch.
- Press the speed control lever gently by your right thumb.
- Brake releases automatically and scooter will move forward (Remark: do not press the speed control lever too fast)
- Push right handlebar moves scooter turn left when operating.
- Push left handlebar moves scooter turn right when operating.
- Steer the handlebar in the middle, scooter will move in forward direction.
- Release the speed control lever, until scooter has slowed down or fully stopped.
- Brake can be automatic locked when scooter fully stopped.

Finish operating

1. Make scooter fully stopped
2. Off the switch and remove the key or press the rocker switch “0”.
3. Get down scooter in safety.
4. Fold the scooter according to the instruction: pictures 24 to 26.

VIII. Basic Troubleshooting

The main reason is battery without sufficient capacity or performance declined, and most of the electrical equipment issue can be solved by yourself.

- Please check the key is inserted into the switch /rocker switch, and keep it “on”.
- Check it if the battery is fully charged or not. (Refers to “VI” 、 Battery and Battery Charging)
- If the battery capacity is insufficient, please increase the charging time/ cycles. (Refers to “VI、 Battery and Battery Charging)
- If the issue continued, then battery capacity testing is needed.

Scooter can not work continually when you are driving it

- Battery line is loose.
- Motor carton bush is damaged.

Speed suddenly slows down when driving

- Battery capacity is insufficient.
- Battery aging.

If met the problem that you can not solve it by yourself, please contact your dealer for further consult and assistance.

IX 、 Maintenance

There are few parts of SOLAX scooter require maintenance.

The following issues must be checked and maintained periodically:

The connection of the battery and electrodes

- Ensure the electrode connections are tight and have no corrosion.
- The battery should be placed flatly inside the battery holder.

Wire Connector

- Check all the wire connectors regularly.
 - Check all the wiring insulation condition, including the plug of the charger regularly
- Repair or change the damaged connector and connector joint.

ABS Plastic Cover

- Control panel, front cover, footboard and back cover are all made by durable ABS plastic with baking finish on the surface. Do not use oil or other chemical liquids to wipe the scooter. In order to prevent the electrical components from damage, do not wash the scooter from the tap directly.

Bearings and Motor/Transmission Parts

- The components have injected lubricant and are sealed; therefore, it is unnecessary to inject lubricant any more.
- Protect all the electronic components from moisture, such as control panel, battery charger and other electric controlled components.
- If some components become damp, please dry it before use.

SOLAX ELECTRIC SCOOTER

Warranty Card

User name		ID No.	
Address		Phone No.	
Model		Item No.	
Purchasing Date	YY	MM	DD
Guarantee period	12 months warranty from purchasing date (6 months warranty for battery)		
Manufacturer	Dongguan Prestige Sporting Goods Co. Ltd.		
Dealer (Stamp/Signature)			
Phone No./Address			

(1). Warranty Statement:

Dealer is responsible for the repair or replacement from the parts when quality problems of Materials, manufacture or assembling comes out under the normal usage.

(2). Warranty Exclusions:

- a. Damages caused by improper operation and maintenance;
- b. Damages caused by irregular spare parts;
- c. Damages caused by accidents;
- d. Consumables are not covered by warranty such as the tires, bearings, bulbs etc.

- e. Damages caused by unauthorized refit of the scooter;
- f. Damages caused by natural disasters such as hurricanes, floods and earthquakes;

1. Warranty stub for dealer

SOLAX ELECTRIC SCOOTER

Warranty Card

User name		ID No.	
Address		Phone No.	
Model		Item No.	
Purchasing Date	YY	MM	DD
Guarantee period	12 months warranty from purchasing date (6 months warranty for battery)		
Manufacturer	Dongguan Prestige Sporting Goods Co. Ltd.		
Dealer (Stamp/Signature)			
Phone No./Address			

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- e. Damages caused by unauthorized refit of the scooter;
- f. Damages caused by natural disasters such as hurricanes, floods and earthquakes;

2. Warranty stub for customer

SOLAX ELECTRIC SCOOTER

Warranty Card

User name		ID No.	
Address		Phone No	
Model		Item No	
Purchasing Date	YY	MM	DD
Guarantee period	12 months warranty from purchasing date (6 months warranty for battery)		
Manufacturer	Dongguan Prestige Sporting Goods Co. Ltd.		
Dealer (Stamp/Signature)			
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- f. Damages caused by natural disasters such as hurricanes, floods and earthquakes;