









# Owner's Manual

# Suitcase Scooter

model no.S204311M



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# Introduction

#### Dear Customer:

Thank you for choosing Solax-Suitcase Scooter

Please read this manual carefully before operating your scooter for the first time. This manual is applicable to the Solax-Suitcase Scooter. If you do not understand all of the content completely or you need further assistance, please contact your scooter supplier: Dongguan Prestige Sporting Goods Co. Ltd.

Calls to the following number are not free. In case of emergency, you may contact dealers nearby for assistance.



86-769-85922501



info@solaxtech com

This manual covers the Solax-Suitcase Scooter from an operational approach, safety measures, assembly instructions and way of dealing with emergencies.

The following symbols are used in this manual in order to indicate warning and safety instructions drawn to your attention; therefore, it is important for you to fully read and understand these before using the product for the first time.



#### **WARNING:**

Failure to note the warnings in this manual can cause you personal injury.

ATTENTION:

Failure to note the notification can damage your scooter.

All the information and pictures in the manual are correct at the time of printing. We reserve the right to make alterations to the product and user manual without prior notification.

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# 1. Product Feature

The Solax Suitcase Scooter has the following main components: Control Panel, steering handles, seat folding lever, backrest, art rest, seat, steering column, seat frame, front/ rear covers, front/ rear tyres, anti-tip wheels, folding release lever, angle adjustment lever, height adjustment lock, carry handle, batteries. (See Fig 1)

The design of the Solax-Suitcase Scooter has several features to help with; Safety and comfort, ease of operation, folding, unfolding and convenience of carrying, lightweight and stability. Its mains characteristics are:

#### Its mains characteristics include:

- 1. The frame is made of advanced aluminum alloy which is light, strong and durable.
- 2. No tools required for folding and unfolding.
- 3. Seat, front and rear frames can be folded, for ease of carrying.
- 4. The Scooter is a portable and when folded, its size can be put in the boot of a car or carried on public transport.
- 5. Battery is easy to load and unload.
- 6. Comfortable ergonomic driving position. The handle bar can be adjusted to a comfortable height and angle.
- 7. 6 inch solid front tyres and 7 inch solid rear tyres.
- 8. Smooth acceleration and braking.
- 9. Body shape is striking and elegant.

In conclusion, the Solax-Suitcase Scooter is a unique product, suitable for all adults who have mobility issues.





# II. Functions

#### **Control Panel**

The control panel is the main operating interface with the user. The controls to operate the forward and backward movement of the scooter, battery level indicator, speed controller and key switch are located here. It consists of key switch, speed controller, direction control levers, horn button, battery power indicator and cover panel. (See Fig 2)



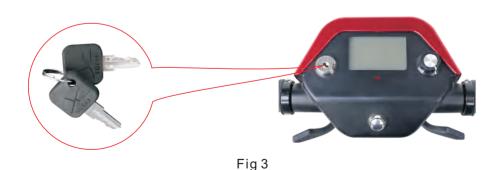


### Warning:

Do not put the scooter in a humid and wet environment. If the control panel has been affected by moisture before using, please ensure it is dry when you operate it.

# Power switch (See Fig 3)

Please insert the key into the power switch and turn clockwise to power on the scooter. Please turn the key in an anticlockwise direction and remove the key from the power switch after using.





**Warning:** if the key is removed when the scooter is in use, the electromagnetic brake will engage and the scooter will stop suddenly.

#### Battery power indicator(See FIG 4)

The Battery power indicator shows the status of charging of your batteries, so as to provide a reference to indicate whether a further charge is needed. This is shown as a battery shaped bar with an number of lines. The more lines shown, the greater the charge level.

When you turn on the power the battery power indicator will display the power remaining in your batteries. The battery indicator bar will pulse when charging is taking place.



Fig 4

#### Telescopic handlebar

Press down the height adjustment lock and adjust the steering column to the desired height. Lock the lever back into the closed position to secure the handlebars in place. (See Fig 5)



Fig 5

#### **Direction Control Levers**

The direction control levers are used to control the forward and backward movement of the scooter.

- · Hold the handlebars with both hands.
- The right control lever moves your scooter in a forward direction. (See Fig 6)
- The left control lever moves your scooter in a back direction. (See Fig 7)
- The speed control will return to the center position when released and the brake will be locked.



Fig 6



Fig 7

### Speed controller(See FIG 8)

The speed controller is used to set the maximum and minimum speed for your scooter.

By turning the dial to right, the speed is increased. By turning the dial to the left, the speed is decreased.



Fig8

#### Horn button(See FIG 9)

The horn button can be pressed to give a warning to other user



Fig9

# Unfolding and folding the body

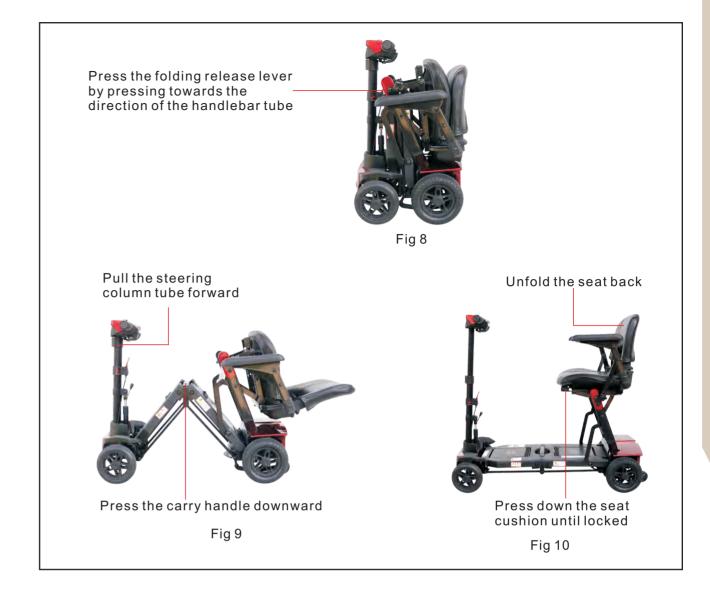
#### Unfolding:

- 1. Press the folding release lever inwards. (See Fig 8)
- 2. The frame will loosen automatically. Using one hand pull the steering column forward, then using the other hand press the carry handle downward until the platform is flat and the locking mechanism engages. (See Fig 9)
- 3. Press down the seat cushion and unfold the seat back in place. The seat should be fully locked in place. (See Fig 10).

#### Warning:



- 1. Please keep your fingers away from the folding and hinged parts because this may trap or pinch your fingers when unfolding the scooter body.
- 2.Do not unfold the scooter body until the folding release lever has been pressed.
- 3. When unfolding the scooter, the seat will lock in position with a "click".
- 4. Do not force the mechanism apart.



#### Folding:

- 1. Push the seat folding lever inward. (See Fig 11) . Using one hand pull the front of the seat upward whilst using the other hand to press down on the seat back edge. Fold down the seat back.
- 2. The front and back sections of the frame will lift and you can then pull on the carry handle to bring the sections together. (See Fig12).
- 3. When the frame has folded most of the way, use both hands (one hand press the steering column backward and the other hand pushing the seat edge forwards) push the sections inward (See Fig 13) until the frame has folded completely and locked in place.







Using one hand press the steering column backward and with the other hand pushing the seat edge forward, push the sections inward.



Fig 13

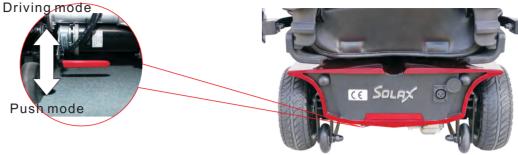


Fig 14



#### Warning:

ensure that the brake mechanism is in Driving Mode before using the scooter.

#### Controller

The controller is fixed under the rear cover and it receives the signal from the control panel and transfers instructions to the motor and brake.



#### Warning

Please do not place the scooter in a humid or damp environment. If the controller has been affected by moisture, make sure to dry it is before operation.

#### Motor/ Transmission component

Motor/Transmission components will convert the electrical energy to rear wheel drive.

### Brake (See Fig 14)

The SOLAX-Suitcase Scooter is equipped with electromagnetic brake. Please do not switch off the brake whilst in operation. To move the scooter by hand you need to release the brake mechanism. The manual brake release leaver can be found by either raising the rear of the scooter or by folding your scooter. This will allow movement by hand,

- 1. Push mode: Press the brake lever downward to release the brake.
- 2. Driving mode: Pull the brake lever upward to engage the brake.

# III. Specification

Model	S204311M
Overall Length	950mm (37.4inches)
Overall Width	450mm (17.7inches)
Tyres (Solid Wheels)	6 inches of front wheel 7 inches of rear wheel
Maximum Speed	6km/h (3.7mph)
Safe Gradient/ Maximum Gradient	0° –13°
Range Up To	15km (9.32 mile)
Turning Circle	1550mm (61inches)
Weight (without battery)	24kg(53 lbs)/22.5kg(49.6 lbs)
Colour	red and blue (optional)
Seat	Low on, no angle is adjustable

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Drive System	Rear wheels drive (4.5A)
Brake	Intelligent, regenerative, and electromagnetic
Telescopic vertical pipe	2 adjustable parts
Maximum Weight Capacity	136Kg
Obstacle height	40mm
Battery	Lithium battery
Motor	24V 120W
Battery Charger	DC29. 4V/2A Automatic protective charger

# IV. Safety Requirements

### Driving Surface

SOLAX-Suitcase Scooter operates at its best under normal driving conditions (such as dry level ground like concrete or asphalt). However, it may be used on other surfaces, such as grassland, gravel etc. There are some considerations to take into account when driving on different surfaces:

- · Please read this manual before driving the scooter.
- Make sure of your physical condition before driving the scooter.
- SOLAX-Suitcase Scooter can be used on short grass safely.
- Try to avoid driving into the loose gravel, soil and sand.
- Do not drive the scooter on sand.
- Do not drive the scooter if you can't tell the condition of the surface.
- SOLAX-Suitcase Scooter scooter can climb over an obstacle with a certain height, but you must minimize the speed and slowly drive over the obstacle. (FIG 15)

Load capacity	Height
<136Kg	40mm





#### Warning:

Do not exceed the specify climbing angle (0-13°) Please 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 when driving the scooter.
- Do not operate the scooter whilst under the the influence of alcohol or drugs.
- Remove the key when you leave the scooter.
- · Ensure the seat is fixed and fastened.
- · Please slow down when driving on uneven or soft ground.
- Please slow down before turning.
- · Do not park on slopes.
- Drive carefully when approaching slopes, uneven ground surface and unprotected area such as curbside, vestibule and stairs etc.
- Do not alter any settings or modify the scooter in any way.
- Please be careful when driving in busy streets, markets, shopping centers or where other pedestrians and road users are present
- 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 prohibited.
- Please ensure the safety of the batteries when your scooter is on the other vehicles for transportation.
- Do not drive the scooter partially on the road/footpath. This will damage the scooter.
- · Do not exceed the maximum tolerance gradient when driving.
- Do not exceed the maximum weight capacity.
- Do not reverse on uneven slopes or uneven ground; be careful when passing over slopes.



#### Warning<sup>\*</sup>

Batteries should be protected from frost. Do not charge batteries in freezing conditions, otherwise the battery will be damaged. Personal injury can occur **Warning:** 

Please do not drive on ice, slippery ground or saline alkali land, otherwise, accidents and personal injury may be caused.

# ∨. Battery and Charging Method

This scooter is designed with one maintenance free discharging Li-polymer battery with a long usage time as well as a long working life when cared for correctly. Charging with a charger makes it easy to use.

- Charge the battery before the first operation. Please charge the battery every 3 months.
- In order to drive the scooter smoothly, the battery should be fully charged. Please remove the battery when you don't use the scooter.
- Charge the battery at least 7 hours first time.

# Charging s teps:

1. Turn the scooter off and remove key. Open the bottom charger cap and insert the plug into the charge socket. (See Fig 16)







Fig 16



Warning: Connect the charger socket and charger plug properly.

- 2. Insert one end of the AC power cable into the socket of your household power supply. Then insert the other plug into the socket of the charger. Verify the connection before you turn on the main power switch. The charger unit will display a light. Red light indicates power on, orange light indicates on charge and green light means fully charged.
- 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.
- 4. If the red light is off when the power is on, please check whether the power plug is properly inserted.
- 5. Normally allows 8-14 hours for charging.



#### 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.

Warning:

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 the battery voltage is close to full, the battery charger outputs a small current. When the battery is full, the battery charger will output very little current. 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. The other light has two functions, it is orange when charging and it will become green when the battery is charged fully. The red one will sometimes still remain on after pulling the charger plug out from the power socket; it needs seconds for the red light to go out.

#### Other chargers can be used?

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

#### How often should you charge the battery?

The charge time depends on the following elements:

- Driving the scooter all day.
- Driving the scooter occasionally.

#### Following information will offer safe and reliable charge method.

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

#### How can you get the maximum operating distance?

Some driving conditions such as hills, ramps, uneven and soft surfaces, turning and weather conditions will affect the driving distance and recharge time.

Several methods for obtaining the maximum driving distance

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



#### 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 is the power of the new battery weak?

The Battery can be charged quickly and can be used for a long time after being fully-charged. The battery is fully charged before leaving the factory, but may change its initial performance during the transportation due to the temperature. The power of the battery will be lost in high temperatures and it will extend the charging time in low temperatures. The battery needs a few days to adapt to the surrounding environment before it reaches fully stable performance.

More importantly, the battery can only achieve high performance after using for several times through charging-discharging cycles.

#### Please follow the steps to improve the battery performance:

- 1. Charge the battery at least 7 hours the first time.
- 2. Please drive in safe and familiar areas. Low speed is recommended the first time. Do not travel too far until you are familiar with the operational range of the scooter.
- 3. Please give the battery another full charge after operated it the second time and this will increase the battery up to 90% capacity.
- 4. Drive the scooter again to discharge the battery.
- 5. The battery capacity will increase 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 charge 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 point.
- Store your scooter in a dry and warm place.



#### Warning:

If battery exposed to frost, it should be kept warm for several days before charging.

If you leave the scooter for an extended time, please place a suitable support under the footboard to support the scooter. This can reduce pressure on the tyres when stationary for lengthy periods.

# VI. Operation Method

#### Inspection before operating:

- Please inspect the battery and make sure it is fully charged. (Refers to "V. Battery and Battery Charging")
- Please make sure you know the route well. (Including the crowd, animal, obstacle)
- · Avoid uneven and hilly road condition.
- Check if the key is inserted into the key switch. (Refers to "II. Function Introduction")
- Make sure your hands are on the handle bar. (Refers to "II. Function Introduction")
- · Please check the horn is working.
- · Please inspect the seat is in the right position and locked.
- · Please check the steering column quick release is locked.

### **Driving**

Please follow the instructions after you choose your route:

- Press the speed control lever gently with your right thumb.
- Brake releases automatically, and scooter will move forward with the speed you set.
- · Pushing right handlebar moves scooter to the left.
- Pushing left handlebar moves scooter to the right.
- Move the handlebar in the middle, scooter will move in forward direction.
- · Release the speed control lever, until scooter has slowed down or fully stopped.
- Press the speed control lever gently with your left thumb, then scooter will reverse with the speed you set.
- · Brake will be automatic locked when scooter fully stopped.

### Finish operating

- · Make sure the scooter is fully stopped.
- · Turn off the switch and remove the key.
- Carefully get off the scooter.

# VII. Battery Problems

The capacity of the battery may appear to be low. The main reason is that the battery has insufficient capacity or performance is declining. Most of the electrical equipment issue can be solved by yourself.

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

#### Scooter does not work continually when you are driving it

- · Battery line is loose, check battery is inserted correctly.
- · Motor carbon bush is damaged.
- Please contact your scooter supplier for assistance.

#### Speed suddenly slows down when driving

- Battery capacity is insufficient, fully recharge the battery.
- Battery aging, a new battery may be required...

If you encounter problems that you can not solve it by yourself, please contact your dealer for further information and assistance.

# VIII.WEEE and Battery Disposal

#### WEEE and Battery disposal

Products labeled with the symbol of a crossed-out wheelie bin as shown below are electrical and electronic equipment (EEE). The crossed-out wheelie bin denotes that waste electrical and electronic equipment and batteries must not be disposed with the remainder of non-separated household waste, but should instead be collected separately as prescribed by the local laws and regulations.



Electrical and electronic equipment (EEE) and batteries may contain materials, components and substances which can be dangerous to the environment and harmful to human health if not disposed correctly.

Waste electrical and electronic equipment and batteries can be delivered free of charge by any private person to recycling stations or to other collection sites, or it can be collected directly from the households. For more detailed information, please refer to your local municipality, your household waste disposal service, or the shop where you purchased this product.

As a consumer, you should not dispose of electrical and electronic equipment and batteries together with your household waste. In this way, the environmental impact associated with disposal of electrical and electronic equipment and batteries is reduced and there will be more opportunity for reusing, recycling and recovering electrical and electronic equipment waste.

# X.Maintenance

# There are few parts of SOLAX foldable scooter which 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 fully inside the battery holder.
- 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 point, if needed through you agent.

#### **ABS Plastic Cover**

• Control panel, front cover, footboard and back cover are all made by durable ABS plastic with a gloss 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 with a hose. The scooter should only be wiped using a damp cloth.

#### **Bearings and Motor/Transmission Parts**

- The components have injected lubricant and are sealed; therefore, it is unnecessary to inject lubricant.
- 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.

#### Storage

Refers to "V. Battery and Battery Charging" and "How to handle scooter and battery".

# X.Warranty Card



# Warranty Statement:

The dealer is responsible for the repair or replacement of the parts when quality problems with materials, manufacture or assembly develop under the normal usage. This does not affect your statutory rights.

### **Warranty Exclusions:**

- a. Damages caused by improper operation and maintenance;
- b. Damages caused by use of unauthorised spare parts;
- c. Damages caused by accidents;
- d. Consumables are not covered by warranty such as the tires, bearings, etc.
- e. Damages caused by unauthorized refit of the scooter;
- f. Damage caused by improper use and overloading and use in inappropriate conditions.
- g. Damages caused by natural disasters such as hurricanes, floods and earthquakes.

# 1.Warranty stub for dealer

	Warranty Card
User name	ID No
Address	Phone No
Model	Item No.
Purchasing Date	YY MM DD
Guarantee Time	12 months warranty from purchase date Battery is 6 month warranty
Manufacturer	Dongguan Prestige Sporting Goods Co. Ltd.
Dealer (Stamp or Sign)	
Phone No. (or Address)	

# Warranty Statement:

The dealer is responsible for the repair or replacement of the parts when quality problems with materials, manufacture or assembly develop under the normal usage. This does not affect your statutory rights.

# **Warranty Exclusions:**

- a. Damages caused by improper operation and maintenance; b. Damages caused by use of unauthorised spare parts; c. Damages caused by accidents;

- d. Consumables are not covered by warranty such as the tires, bearings, etc. e. Damages caused by unauthorized refit of the scooter;
- f. Damage caused by improper use and overloading and use in inappropriate conditions. g. Damages caused by natural disasters such as hurricanes, floods and earthquakes.

# 2. Warranty stub for customer

Warranty Card				
User name	ID No			
Address	Phone No			
Model	Item No.			
Purchasing Date	YY MM DD			
Guarantee Time	12 months warranty from purchase date Battery is 6 month warranty			
Manufacturer Manufacturer	Dongguan Prestige Sporting Goods Co. Ltd.			
Dealer (Stamp or Sign)				
Phone No. (or Address)				

# Warranty Statement:

The dealer is responsible for the repair or replacement of the parts when quality problems with materials, manufacture or assembly develop under the normal usage. This does not affect your statutory rights.

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