days® Healthcare

ST-1 Instruction Booklet

Strider ST#1

CE

Issue 1 02/04/2010

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INTRODUCTION

Thank you and congratulation on purchasing your new Days Healthcare Ltd. Mobility Scooter.

We pride ourselves on providing safe and comfortable products. Our goal is to ensure your complete satisfaction. We sincerely hope you enjoy your Days Healthcare Ltd. Mobility Scooter.

Please read and observe all warning and instruction provided in Instruction Booklet before you operate with various convenient function of this scooter. Also, please retain this booklet for future reference.

If you have any question, you can contact :

or your local dealer:

IMPORTANT PRECAUTIONS

- Only one person at a time could ride a Days Healthcare Ltd. Mobility Scooter.
- Maximum load is 115 kg / 250 lbs.
- Turn key off before getting on or off your scooter.
- Always drive carefully with your feet on the scooter and be aware of others in your area.
- Always use pedestrian crossing wherever possible. Take extreme care when crossing roads.
- Do not drive on slopes exceeding 8 degrees, and take extreme care when turning on slopes.
- Do not use full power when turning a sharp corner.
- Do not drive scooter unless seat and tiller are locked and secured in driving position.
- Do not use scooter if rear anti-tip wheels are damaged or removed.
- Take extra care and drive in low speeds when backing up, riding downhill, riding over uneven surface, or kerb climbing.
- Scooter may not operate well in high humidity.
- Never put your scooter in neutral when stopping on slopes.
- Follow all traffic laws when you ride in vicinity of public roads.
- Our recommendations may occasionally differ from those of your Therapeutic Adviser or Physician, as they have a better understanding of your abilities. Where this is the case, you must follow their professional advice, as they have your detailed medical history.
- Do not use your scooter when your driving ability is impaired by medication.
- Under no circumstances should the scooters top speed be increased.
- Please make sure that the seat and all moving parts are secure before mounting the scooter.
- Do not carry heavy objects on scooter.
- Do not hang bags on folding backrest.
- Do not use scooter on stairs or escalator.

SAFETY INFORMATION ON ELECTROMAGNETIC INTERFERENCE (EMI)

CAUTION : It is very important that you read this information regarding the possible effects of Electromagnetic Interference on your motorized scooter.

Powered wheelchairs and motorized scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such a radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones. The interference (from radio wave sources) can cause the motorized scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the motorized scooter control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each motorized scooter can resist EMI up to certain intensity. This is called its "immunity level." The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This immunity level of this motorized scooter model is 20 V/m.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimized.

The sources of radiated EMI can be broadly classified into three types :

1. Hand-held portable transceivers (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie," security, fire, and police transceivers, cellular telephones, and other personal communication devices;

> ⚠ **Some cellular telephones and similar devices transmit signals while they are ON, even when not being used.**

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle; and

3. Long-range transmitters and transceivers such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

> ⚠ **Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your motorized scooter.**

Motorized Scooter Electromagnetic Interference :

Because EM energy rapidly becomes more intense as one move closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the motorized scooter control system while using these devices. This can affect motorized scooter movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the motorized scooter.

Warnings :

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect motorized scooters. Following the warnings listed below should reduce the chance of unintended brake release or motorized scooter movement which could result in serious injury.

1. Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the motorized scooter is turned ON;
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
3. If unintended movement or brake release occurs, turn the motorized scooter OFF as soon as it is safe;
4. Be aware that adding accessories or components, or modifying the motorized scooter, may make it more susceptible to EMI; and

> ⚠ There is no easy way to evaluate their effect on the overall immunity of the motorized scooter.

5. Report all incidents of unintended movement or brake release to the distributor listed on the inside front cover of this manual. Note whether there is a source of EMI nearby.

Important Information :

1. 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994). The higher the level, the greater the protection.
2. The immunity level of this product is 20 V/m.

IDENTIFICATION OF PARTS

Before attempting to drive this scooter on your own, it is important that you familiarize yourself with the controls, and how to operate them.

Figure 1 - ST-1 Front View

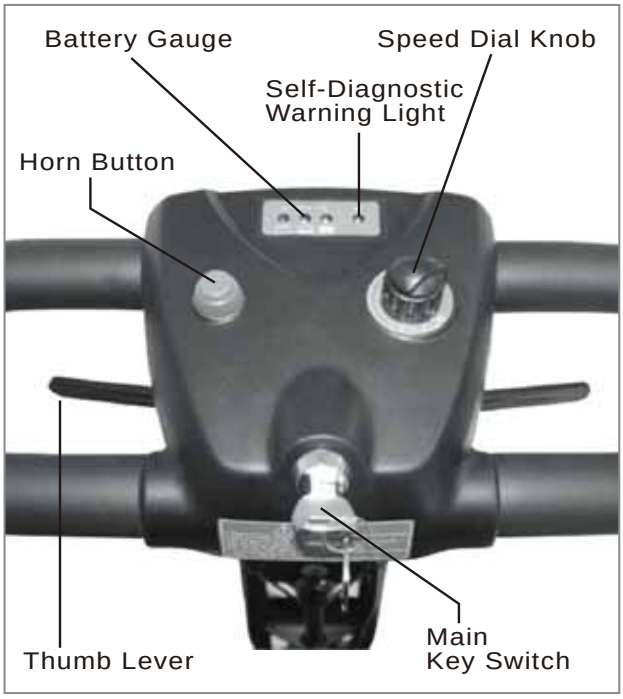


Figure 2 - ST-1 Top Control Panel

Figure 3 - ST-1 Back View

FUNCTION OF PARTS :

Main Key Switch (A)

1.Turn the key to the right - Turn the scooter on
2.Turn the key to the left - Turn the scooter off

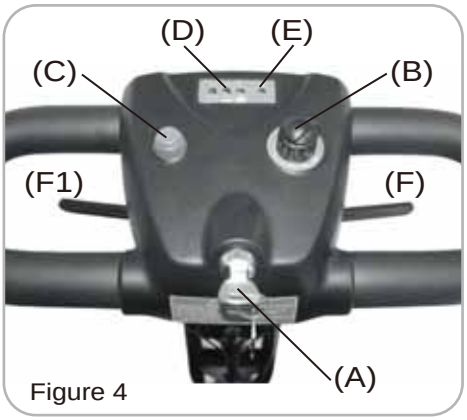


Figure 4

> ⚠ **Always ensure that the scooter is switched off before getting on or off the scooter and before removing any items of the scooter.**

> ⚠ **The ON/OFF key switch must only operated, when in motion, in an emergency. Turning the scooter OFF whilst driving will bring the scooter to an abrupt stop.**

Speed Dial Knob (B)

The image of rabbit means fast or high speed. The image of turtle means slow or low speed. By turning this knob towards chosen image you can control overall speed of the scooter.

> ⚠ **Before start driving the scooter, set the speed to low speed by turning the knob towards turtle image,**

> ⚠ **Driving in high speed when encounter an up slope, and driving in slow speed when encounter a down slope.**

Horn Button (C)

Press horn button once to sound warning tone when necessary.

Battery Gauge (D)

The meter gives an approximation of battery strength. Green indicates a fully charged battery. Without any Green light means no power required to charge batteries immediately.

Self Diagnostic Warning Light (E)

Flashing light indicates there is a problem within scooter. See page 12 for more information.

Thumb Lever (F) (F1)

Pushing right thumb lever forward moves scooter forward. Pushing left thumb lever forward will move scooter backward. (This configuration can be reversed if required by local authorized dealer.) While in use this lever is also your accelerator. The further you depress the thumb lever, the faster you will go. (NOTE: subject to the position of the speed control.) Releasing the thumb lever engages the automatic brake.

> ⚠ **Releasing the thumb lever engages the automatic brake, but will taxi for a short buffering distance, please keep safe distance when stop driving to prevent any danger.**

Tiller Angle Adjustment :

1. Lift up the lever (G) to disengage the pin from hole's position.
2. Simultaneously, adjust the steering fore-aft to most comfortable angle, and ensure pin is well locked in it's position.

Seat Rotation Adjustment :

1. Lift lever (H) upward to disengage pin.
2. Simultaneously, rotate seat (I) (or lift up to disassemble the seat) to most comfortable angle, and ensure pin is well locked in it's position.

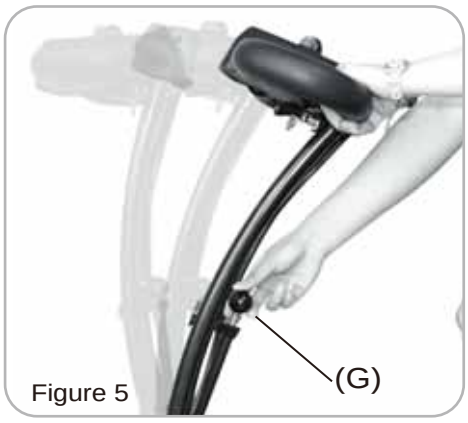


Figure 5

Figure 6

Circuit Breaker :

If scooter's circuit system malfunctions or over loaded, the circuit system will automatic shut down the power to ensure driver's safety. After power off, by pressing button (J) to regain power.

Free-Wheeling Lever :

To push scooter for short distances, put it in freewheel mode by pushing forward on free-wheel lever to N this disables the drive system and brake system. Pull free-wheeling lever backward to D to re-engage drive and brake system; this takes scooter out of freewheel mode.

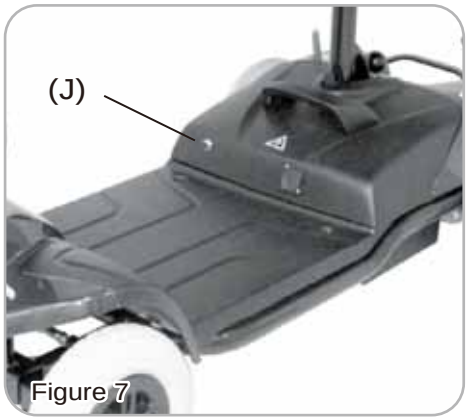


Figure 7

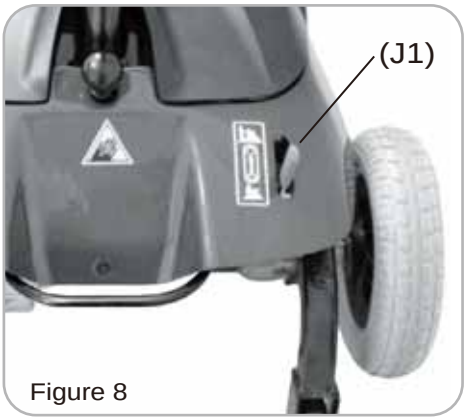


Figure 8

Basket :

Basket assembling and disassembling
By using a spanner to lock 3 screws (J2) in front of steering.

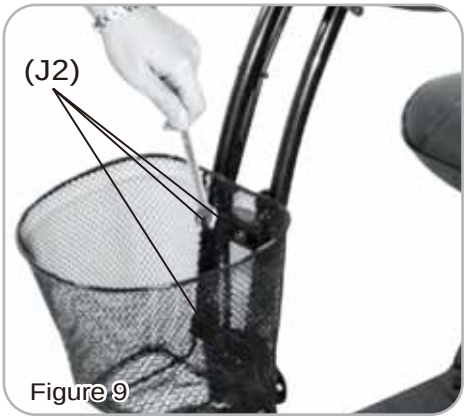
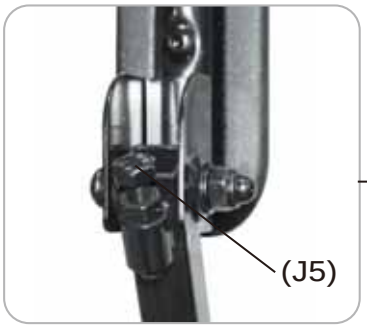


Figure 9

⚠ Remove basket by releasing 3 screws (J2)

Armrest assembling and angle adjustment :

1.Remove plugs (J3) at both sides.
2.Assembling armrests.
3.Adjust armrest to most comfortable angle, then lock with knob (J4).
4.Adjust screw's (J5) height, to control armrest's angle.



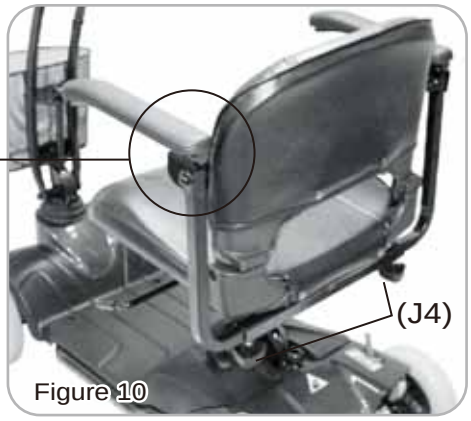
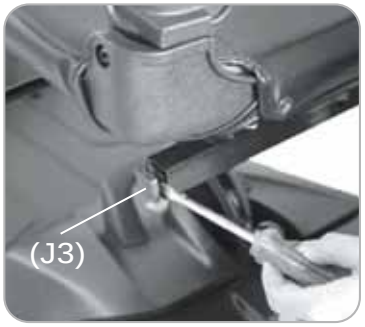


Figure 10



CHARGING THE BATTERIES

Your ST-1 scooter is equipped with two sealed, maintanence free 12V. 12Ah. rechargeable batteries and one 24V/1.8A charger. Batteries must be charged before using scooter for first time and should be recharged after each day's use. Be sure power switch is in OFF position and free-wheeling lever is not in freewheel mode.

1.Insert battery charger cord into Charging Socket (K1) on battery pack.

Figure 11

2.Plug other end of power cable into a standard electrical wall outlet.

3.The charging indicator (K) will normally be red or yellow at this point.

4.Allow batteries to charge until charging indicator turns green.

5.After indicator turns green, unplug battery charger from scooter and wall outlet.

6.If at any time battery charger light flashes green over 40 minutes, this indicates abnormal charging occurred. You should check the following:

- Charger plug is correctly positioned
- Scooter is turned off
- If none of these are the problems, contact your local authorized dealer.

⚠ The time needed to recharge will vary depending on the depletion of the batteries. Charging for longer than necessary will not harm the batteries. They can not be overcharged.

DISASSEMBLING YOUR SCOOTER

I. Seat Disassembling :

Remove seat by pulling up Seat Rotation Lever (H). Then lift up away from scooter.

II. Battery Pack Disassembling :

As indication, Push Release Lever (L) backward and pull Battery Pack Handle (M) to re-move batteries from scooter. Caution: batteries are heavy. When lifting please use correct lifting posture to avoid injury. Ask for assistance if necessary.

> ⚠ When assembling battery pack (M), make sure aim for the battery terminal connection for proper electricity conductivity.

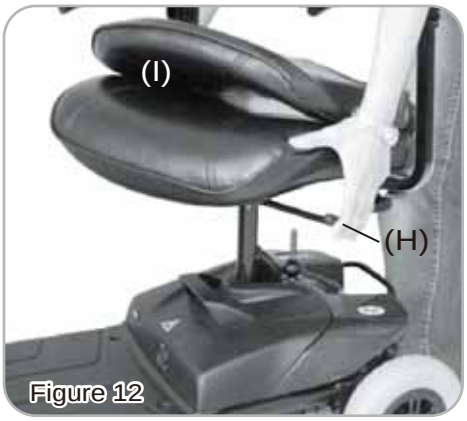


Figure 12

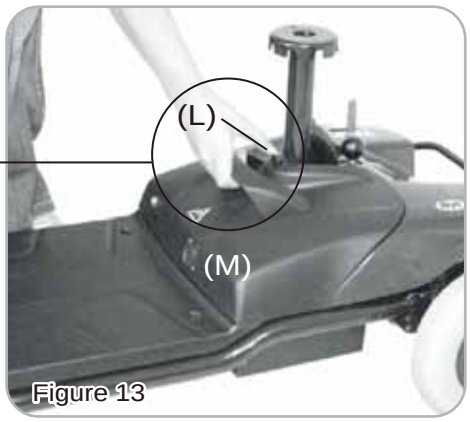


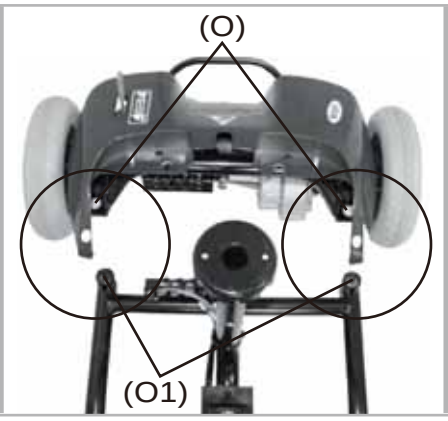
Figure 13

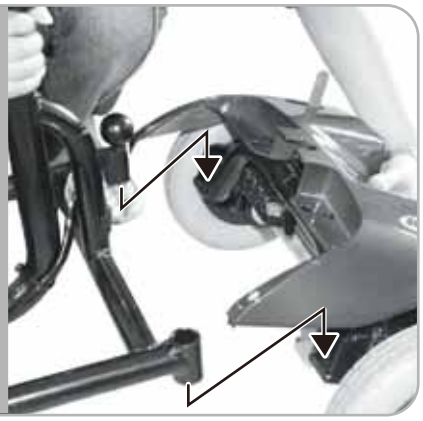
III. Front & Rear Frame Disassembling :

Lift up front & rear frame's fixation pin (N); and hold and pull rear frame as arrow indicates direction to disassembling front and rear frame.

> ⚠ **When disassembled rear frame, do not lean it forward to prevent shroud damage.**
>
> **When assembling front & rear frame, by aiming left and right sides' sticker, push in slightly to complete assembly.**

Figure 14





Steering Fold Method :

Lift up the lever (G) to bend down the steering to the lowest hole position; complete image.

> ⚠ Re-assembling your scooter by vise versa above disassembling procedures.

Figure 15

Fuse Replacement :

1.Follow page 11 Disassembling I~II steps.
2.Remove front shroud's (P) 5 screws (be careful screws' size are different); lift up front shroud (P) as arrow indicates direction.
3.Open fuse box (P1) and replace with backup fuse (P2).

> ⚠ Replace with same power fuse is required.
> After replacement, vise versa assembling procedure to original condition.

Rim Disassembling :

1.By using a screw driver, to lift up rim (Q).

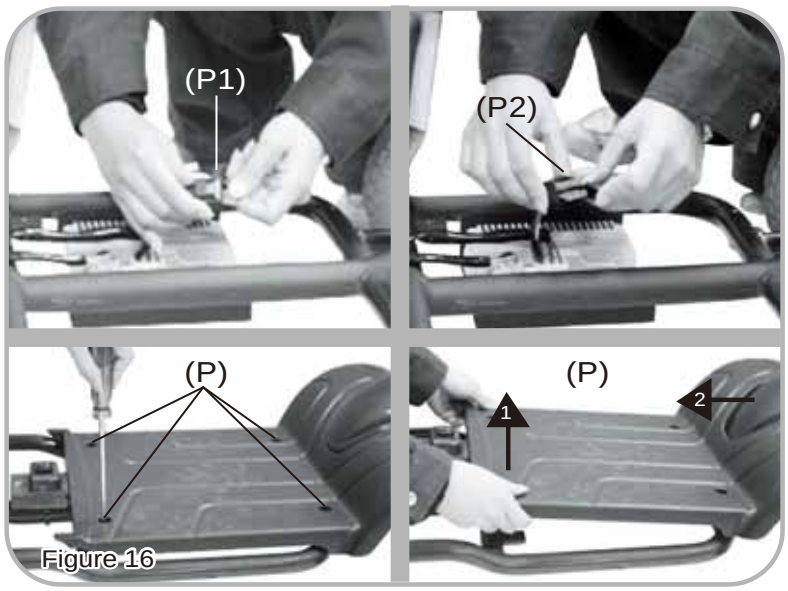


Figure 16

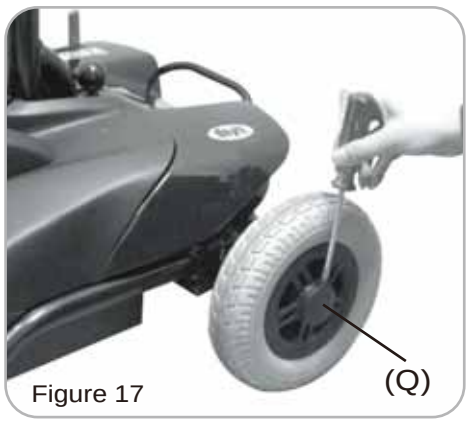


Figure 17

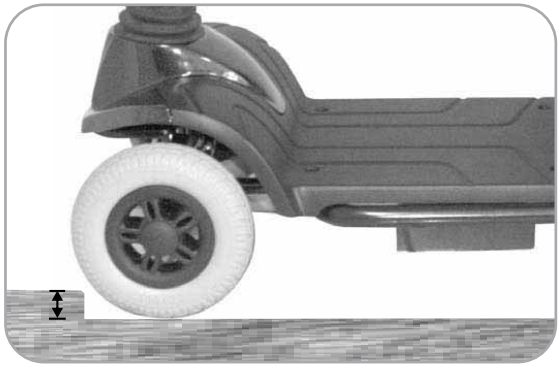
TROUBLESHOOTING

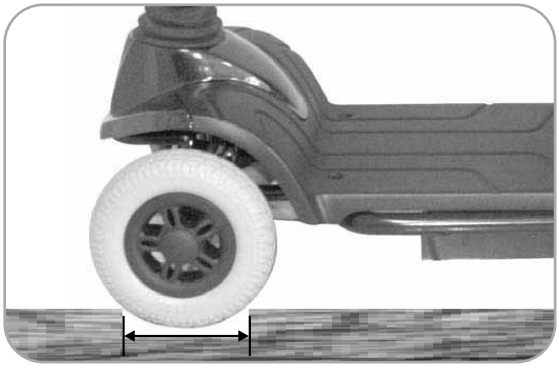
Fault Code	Fault Description	Possible Causes / Corrections
1	Low battery warning only (no fault generated)	The battery needs to be charged.
2	Battery voltage is too low	The battery must be recharged.
3	Battery voltage is too high	The battery is over charged. The speed is too high when driving down a slope.
4	Time out for maximum current	The motor is stalled. The controller outputs the maximum current for more than 15sec.
5	Park brake fault	Check if park brake is released. Engage park brake to normal drive position and restart the scooter. Check park brake connection
6	Speed pot neutral fault	Calibrate speed pot neutral.
7	Speed pot error	Check speed pot connection.
8	Motor error	Check motor connection.
9	Other errors	Internal error. The controller needs to be serviced if the problem persists after switching off and on the controller.

CAUTION

1.Obstacle Climbing :
Your scooter can climb obstacles and kerbs of up to 4cm in height. Never attempt to overcome an obstacle when on an uphill or downhill gradient! Always approach obstacles straight on! Ensure that the front wheels and rear wheels move over the obstacle in one stroke, do not stop halfway!

2.The maximum gap the scooter can drive over is 10cm,





⚠ In unlikely event of a panel display error, you need to re-set the display system by cycling the on/off main switch. The display circuitry is independent of the motor control system. A display console error does not affect scooter speed control.

OTHER

1.Charge the batteries after each trip, if the scooter is not used for some time batteries must be charged at less once a month. make sure that batteries are fully charged, and on returning, charge them again before using scooter.

2.Check the battery gauge before driving to prevent power depletion.

3.Batteries will have aging phenomenon after used for a period of time, the storage capacity will gradually deletion, if damaged, please wrapped them with plastic bag, and contact local dealer for proper disposal.

4.Do not disassemble battery and open sealed parts by yourself to prevent electric shock and burns from acid leakage,

5.Adjust speed to a slow speed when starting off to prevent sudden acceleration.

6.Never attempt to drive downhill backwards.

7.Try not to drive scooter at night or in rain or bad weather.

8.If storing your scooter for a long time (1 month or more), make sure that battery are fully charged, then disconnect the two batteries plugs (W), and the store scooter in a dry location.

9. Front basket weight capacity 3kgs.

SPECIFICATION

Overall Length	1000 mm / 39.4"
Overall Width	510 mm / 20"
Overall Height	890 mm / 35"
Wheels: Front	195 mm / 8"
Wheels: Rear	195 mm / 8"
Weight w/ Batteries	40 kg / 88 lbs
Max. Speed	6.4 kmph / 4 mph
Weight Capacity	115 kg / 250 lbs
Ground Clearance	30 mm / 1.2"
Grade Climbable	8 degree
Curb Climbing	35 mm / 1.4"
Turning Radius	1270 mm / 50"
Suspension	N/A
Brake	Electro-Mechanical
Seat Type	Padded Foldable
Seat Width	425 mm / 17"
Motor Size	250W, 4700 r.p.m.
Battery	(2) 12V. 12Ah
Battery Weight	9.2 kg / 20 lbs
Travel Range	10 km / 6.2 Miles
Battery Charger	1.8A Off Board
Electronics	On / Off Key Switch, Battery Level Indicator, Speed Control Knob

*Subject to change without notice.