USER MANUAL

CONTENTS

1	ABOUT THIS MANUAL	P.2
2	CONGRATULATIONS	P.2
3	ELECTRIC SCOOTERS DIAGRAM	P.2
4	GENERAL LIMITS OF USE	P.3
5	SAFETY RECOMMENDATIONS	P.3
6	SCOOTER ASSEMBLY	P.4
7	BEFORE EACH USE	P.5
8	GENERAL ADVICE	P.6
9	SCOOTER MAINTENANCE	P.7
10	STARTING IN ELECTRIC MODE	P.9
11	BATTERY	P.9
12	OPTIMISING THE BATTERY AND TIPS FOR ELECTRIC USE	P.10
13	METHODOLOGY OF STORAGE AND TRANSPORTATION	P.10
14	WARRANTY	P.10
15	SCOOTER'S DISMANTLING	P.11
16	CE CONFORMITY DECLARATION	P.11
17	TECHNICAL SERVICE	P. 12
18	ELECTRICAL KIT DATA	P. 12

1. ABOUT THIS MANUAL

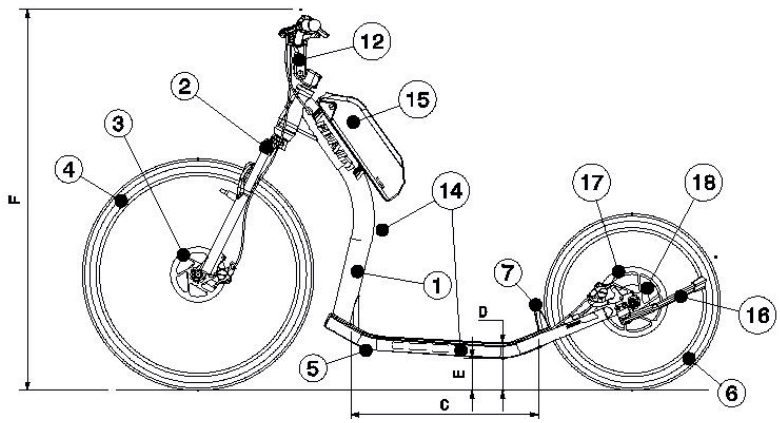
- This manual has been created to help you get the most out of your electric *GRAVITY.* Carefully read, understand and follow the instructions given in this manual. Keep it in a safe place for future reference.
- Please contact us through e-mail if you have any questions. We will guide you in the most complicated procedures and give you advice about anything referring to you *GRAVITY*.
- Failure to follow the warnings and instructions could result in failure of the product, an accident, personal injury or death.
- Failure to comply with the instructions in this manual is the sole responsibility of the user of the scooter.
- This manual covers all the *GRAVITY Scooters* models. *GRAVITY Scooters* produces various models with different accessories and equipment. As a result, this manual may contain information that does not concern your scooter. Some illustrations may differ with respect to the models detailed in the current catalogue.
- The user of this Gravity scooter product expressly recognizes and agrees that there are risks inherent in scooter riding, including but not limited to the risk that a component of your suspension system can fail, resulting in an accident, personal injury or death. By his/her purchase and use of this *GRAVITY* scooter product, the user expressly, voluntarily and knowingly accepts and assumes these risks, including but not limited to the risk of passive or active negligence of *GRAVITY* scooters or hidden, latent or obvious defects in the product, and retailers harmless to the fullest extent permitted by law against any resulting damages. The user further agrees to exempt GRAVITY Scooters, its distributors and resellers all responsibility for any damage to the limits set by law.
- *GRAVITY Scooters* reserves the right, in its sole discretion, to make changes to the product at any time and without prior notice.

NOTE: For a suspension forks and brake system, please refer to the supplier's manual.

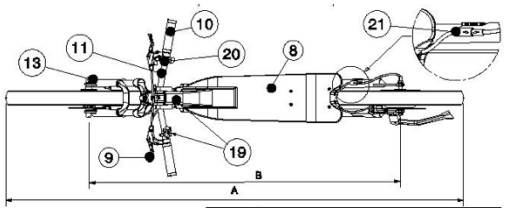
2. CONGRATULATIONS.

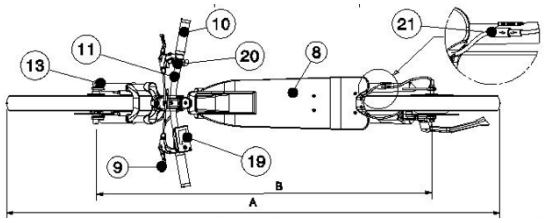
You have chosen a scooter made for *GRAVITY Scooters*. Thank you for putting your faith in us. Your *GRAVITY* is a scooter product of continuous research and multiple testing. Our efforts to ensure the quality of the product aim at safety, resistance, comfort, and, above all, a quality-price rate that satisfies the needs of our customers.
On the next page is the graphic description of the scooter where the most important parts of your GRAVITY are shown, your knowledge will allow you to better understand this manual.

3. ELECTRIC SCOOTER DIAGRAM.



21	Motor plug
20	Throttle trigger
19	Display
18	Electric motor
17	Rear disc brake 203 mm
16	Kickstand
15	Battery
14	Controller case
13	Quick release
12	Adjustable stem
11	Handlebar
10	Grips
9	Brake lever
8	Board
7	Mudguards
6	Rear wheel 20"
5	Protection plate
4	Front wheel 26"
3	Front disc brake 160 mm
2	Front fork
1	Frame





DIMENSION TABLE

MODEL	A	B	C	D	E	F
e-M10	182 cm	125 cm	62 cm	13 cm	8,5 cm	95-102 cm
e-CORE	185 cm	127 cm	64 cm	15 cm	10,5 cm	99 cm
e-CORE Air	185 cm	127,5 cm	64 cm	15 cm	10,5 cm	100,5 cm

ELECTRIC SCOOTERS TABLE

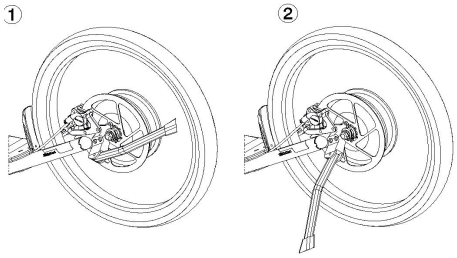
MODEL	Weight with kit 500w 36v	Weight with 1000w 48v	Maximum weight of rider
e-M10	20 Kg.	22 Kg.	150 Kg.
e-CORE		24 Kg.	150 Kg.
e-CORE Air		23 Kg.	150 .

4. GENERAL LIMITS OF USE

There are many different kinds of scooter uses, designed for a variety of purposes. Failure to use your scooter in accordance with the recommendations detailed below may result in damages and accidents.
Gravity electric scooters are designed for use on both asphalt and dirt and for moderate levels of use. They are not designed for jumping or downhill or for continued use at full throttle.
Gravity has limited the electrical kits to give a maximum speed of 25 Km/h.
The electric scooters of Gravity Scooters are certified under the Machinery Directive (2006/42 / CE) and their circulation is subject to the same rules of circulation as CE certified electric bicycles.
The use of this type of vehicle may be subject to specific legislation, depending on the region or municipality where the scooter will be used. The user is responsible for checking applicable legislation and complying with it. Due to the complexity of legislation governing electric mobility vehicles, which varies between countries, cities or even between neighborhoods and areas of the same city, Gravity Scooters SL cannot be held liable for any improper or unlawful use of their electric scooters and requires its users to comply with the rules applicable in each location.
Due to the large number of electronic components used in their assembly, scooters should not be used for jumping or subjected to intense vibrations (such as when descending steps), as this may cause damage to the electrical system. Even if this treatment does not result in immediate breakages, it is very likely that misuse will shorten the life of components.

5. SAFETY RECOMMENDATIONS

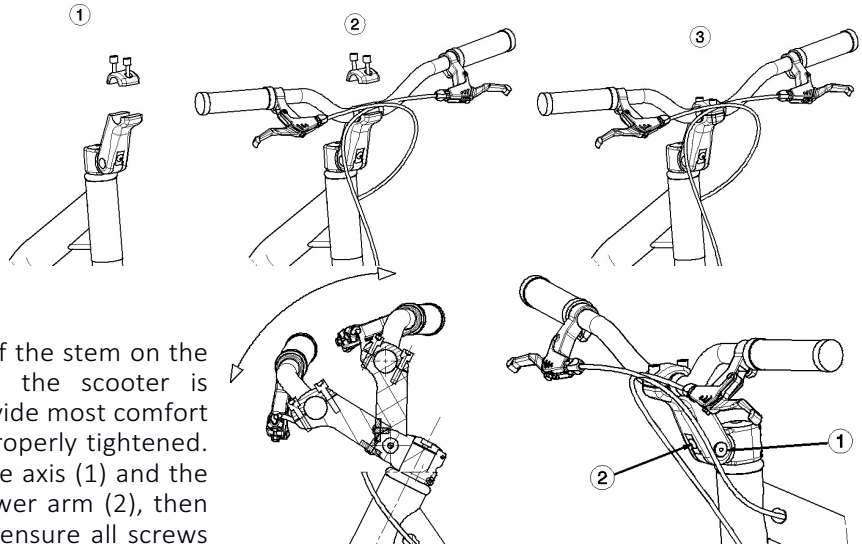
5.1 It is very important to follow the maintenance and repair instructions of this manual. Failing to do so could cause an accident.
5.2 Learn to use your GRAVITY following our recommendations. Do not exceed your possibilities and limits, use the adequate safety equipment: appropriate size helmet, which must be properly attached, protection gear and eye protection.
5.3 Check carefully that the equipment, as well as your scooter is in good shape. Look for possible fissures so that you can immediately replace the components or damaged part of the scooter.
5.4 Pay special attention on wet ground as the nonslip may not work properly and you could fall off the board.
5.5 Wear short or tight trousers so that they do not get tangled in the rear wheel.
5.6 Before connecting the battery, ensure that the scooter is completely dry.
5.7 Protect the scooter from exposure to water at all times - water may cause a short circuit or an electric shock to the rider.
5.8 Never wash the scooter with pressurized water - water could cause damage to electrical connections or the brake cable, and could cause a malfunction or improper functioning of these systems, possibly resulting in an accident.
5.9 Use of the scooter on wet ground, marshy land or on water is not recommended.
5.10 The scooter should not be used on snowy or icy terrain.
5.11 Ensure that the kickstand is raised (position 1) before moving.
5.12 To park the scooter in a stable manner, deploy the kickstand (position 2) and support it on a flat area, never on a slope.



5.13 Ensure that the battery key (Lock) is in the position that prevents the battery from being removed. Otherwise it could detach while underway.
5.14 Excessive vibration may cause a cable or circuit to become disconnected. This scooter is not designed for jumping or use on rugged terrain.
5.15 Do not touch the brake discs or wheels when they are turning, as there is a severe risk of injury by cutting.
5.16 Caution should be exercised in windy conditions. A gust of wind could knock the rider over.
5.17 Wear glasses or contact lenses if required when riding.
5.18 Do not use the scooter with insufficient lighting.
5.19 The scooter is not suitable for use by young children.
5.20 Continued use of the scooter may cause the rider to suffer tiredness or fatigue, especially on uneven terrain.
5.21 The scooter can produce a maximum noise level of 70 dB when operating.

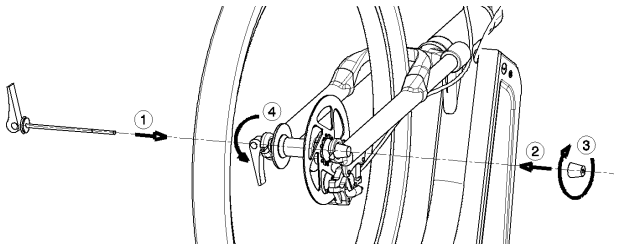
6. SCOOTER ASSEMBLY.

You will receive the electric scooter adjusted and partially assembled; you will only need to assemble the handlebars, wheels, kickstand and connect the motor:



6.1 **Assemble the handlebars**. To assemble the handlebars, you need an Allen key. Remove the screws from the power plate and remove; Put the handlebar into position and adjust to your comfort; reattach the plate and tighten the screws (start threading the screws by hand and then tighten with a wrench).
6.2 **Position the stem**. The height of the stem on the M10 model is adjustable. Once the scooter is assembled, adjust its height to provide most comfort and ensure the components are properly tightened. To do this, loosen the screw on the axis (1) and the screw on the lower part of the power arm (2), then place in the desired position, and ensure all screws are properly tightened.
6.3 **Position the brake and the accelerator** in a comfortable position according to the height of the power plate. To do this, loosen the Allen screw which clasps the brake, place in the correct position and retighten the screw; then do the same with the accelerator.
6.4 **Assembly of the front wheel**. Position the front wheel as shown, tighten the high-speed axle following points 1,2,3 and 4. Make sure the wheel axle is firmly positioned in the fork end.

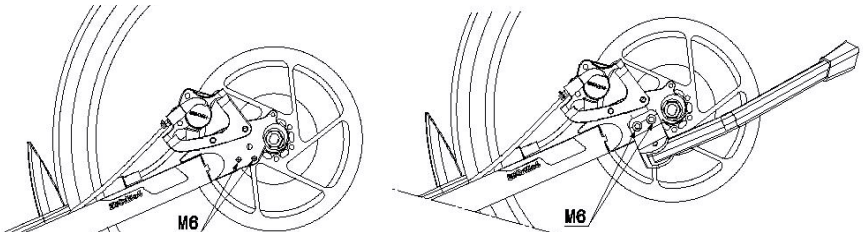
OK NOT OK



6.5 Adjusting the quick-release mechanism. Read the following instructions carefully to set the quick-release mechanism properly and safely:
6.5.1 Open the quick-release lever and clip the wheel into the fork ends, making sure that the axle is properly in place. (see diagram of point 6.4)
6.5.2 Turn the lever to 180º and tighten the quick-release nut (3) by hand in a clockwise direction until it can no longer rotate.
6.5.3 Actuate the lever (4) in the direction of tightening.
6.5.4 If the lever can easily be turned back to the open position, it means that the correct force has not been applied to tighten it. In this case tighten the quick release nut up again. If an excessive amount of force is

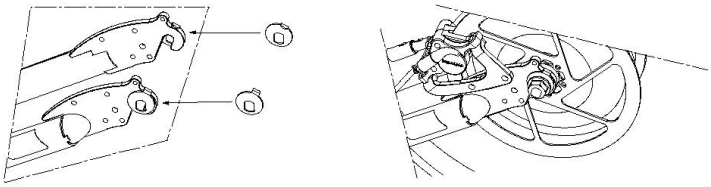
needed to turn the lever, repeat the previous operation but this time loosens the quick-release nut in anti-clockwise direction.
Repeat the procedure as many times as necessary until the coupling is fastened as required.
6.5.5 The quick-release mechanism must be pointing in such a way that it does not interfere with the other scooter's accessories.
6.5.6 If the quick-release mechanism is faulty, take your scooter to a specialized repair shop.

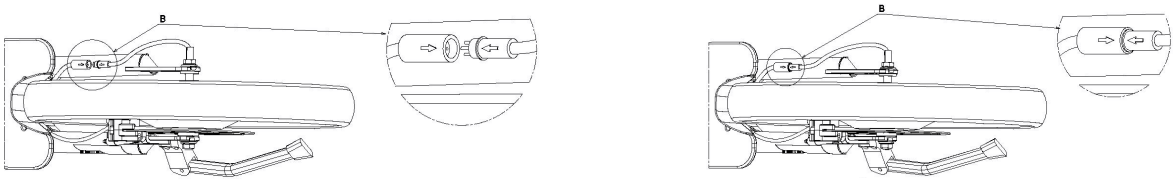
6.6 **Mounting the kickstand**. The kickstand is screwed to the chassis, in the threaded hole beneath the two brake caliper screws.



6.7 **Mounting the rear wheel**. The rear wheel is mounted by inserting its axle into the grooves of the dropouts; insert until possible to perfectly affix the lock washers (washers with 90° tab). At the same time as mounting the wheel, affix the brake disc, by inserting into the slot between the two brake pads, otherwise the disk can become twisted. Once the wheel is positioned perfectly on the dropouts, affix lock washers and make the wheel axle nuts tight, making sure the tabs of the lock washers are perfectly aligned to the dropouts.

6.8 Motor connection. Connect the motor by joining the two black connectors - the connector exiting the wheel axle and the connector exiting the scooter along the fender, making sure you line up the arrows marked on each of the connectors before starting the connection.





7. BEFORE EACH USE

Always inspect your scooter before taking it out. Do not use the scooter if it has not passed the preliminary controls quoted below. Correct any anomaly before each use.
Use the list below to inspect your scooter and its components before every ride. The list is not exhaustive but is designed to assist you with inspecting your scooter. If you detected any problem with your scooter and are unable to repair it, take it to your specialized repair shop.
7.1 **Check frame for signs of fatigue or high stresses**. Carefully inspect the frame for signs of fatigue: scratches, cracks, dents, bent or discolored. If any part shows any damage, fatigue or crack, do not use the scooter and contact us at info@gravity-scooters.com. (See warranty in section 7 of this manual).
7.2 **Check the tire pressure**. Inflate the tires to the pressure range indicated on the tires. High pressures ensure better performance on hard surfaces such as tarmac whereas lower pressures are more suitable for off-road cycling. CAUTION: The pumps you see at service stations inflate tires too quickly and also indicate incorrect pressures. Always use a hand pump to inflate your tires.
7.3 **Inspecting the handlebar and stem**. Make sure that the stem and the handlebar are correctly positioned in line with the front wheel and tightened.
Carefully check the handlebar and the stem for any signs of fatigue: scratches, cracks. Dents, bent areas or discolored areas. If any parts show any signs of fatigue, change it before riding your scooter again. You should also check that the end caps on the handlebar are properly fitted.
7.4 **Checking the suspension setting**. Check that the suspension components are set as required and that none of them reach the end of their stroke. The suspension fork shock affects the behavior of the scooter and it is very important that it is set correctly. If the suspension system is compressed so much that it locks the fork down, it may lead to a loss of control. For more information on setting the suspension, please refer to the supplier's manual.
7.5 **Check both wheels are properly secured in place.** To ensure riding your scooter is a safe experience, the wheels have to be attached to the fork and to the frame. The wheels are attached by nuts requiring wrenches or quick-release mechanisms that enable you to take them off and put them on without using any tools.

CAUTION: If the quick-release mechanisms are not set properly, the wheel or wheels may work loose and come off completely. You may lose control of the scooter as a result and fall. Make sure that the quick-release mechanisms are properly set and closed before using the scooter.
Turn both wheels and check the rim is in line with the frame and the brake blocks. If the rim does not rotate freely, take your scooter to a specialized repair shop.
7.6 **Checking your brakes**. Make sure the front and rear brakes are working correctly.
The *GRAVITY* uses disk brakes. The brake levers are connected to pads that expert pressure on a disc attached to the wheel hubs. (See attached manufacturer's instructions).
CAUTION: If your brakes do not operate correctly, you may lose control of the scooter and fall. Check the brake system carefully before each ride and if you detect a problem, do not use the scooter until it has been resolved.
7.7 **Basis points to check before each electrical use**.

1. Check that the scooter is not wet or excessively damp.
2. Check that there are no loose spokes.
3. Ensure there is a proper connection between motor and scooter. See Figure 5.8.
4. Check that the motor nuts are properly tightened and that lock washers are properly coupled to the chassis. See Figure 5.7.

7.9 **Check that the side stand** is tightly tightened both on the screw that joins it to the chassis and on the screw that sets the leg length. Check that it is in its correct position.

8. GENERAL ADVICE

8.1 Always wear a helmet and gloves when riding.
8.2 To use the scooter, the rider must be able to balance on two-wheeled vehicles.
8.3 GRAVITY SCOOTERS' scooters can accommodate two people as long as local legislation permits. The driver should be the tallest person and should be placed at the back of the handlebar, grabbing him by the sleeves and checking that he can apply the brake levers without difficulty. The other person will grab the handlebar through the central part and will be positioned as forward as possible.
8.4 .In the event of an accident, call the emergency services
8.5 Keep your scooter clean. To ensure your scooter works properly you should keep it clean.
8.6 Keep your scooter in a suitable place.
8.7 When you are not using your scooter keep it stored away from the rain, snow, sun, etc. Rain and snow can cause the metal to corrode and the wood to decompose. The sun's ultraviolet rays can cause the paint to fade and scooter's rubber and plastic parts to crack.
8.8 Protect the scooter from exposure to salt. In areas close to the sea, special care must be taken with the corrosion produced by the saltpeter. Protect the scooter especially from ambient humidity with dehumidifiers and covers.
8.9 When you put your scooter away, keep it off the ground and deflate the tires to half pressure.
8.10 Do not leave the scooter close to electric motors as the ozone they emit damages the rubber and paint.
8.11 Make sure the scooter is in perfect condition before using it again.
8.12 Do not wash your scooter with a pressure water machine. This can damage the mechanical brakes, and even remove the paint from the chassis. Water could penetrate the electrical cable connectors and cause short circuits.
8.13 Protect your scooter from damage. Make sure the scooter does not fall over as this can damage the handlebar, the board, the battery and any other parts.
8.14 The incorrect use of the rack may also cause damage.

9. SCOOTER MAINTENANCE

Maintenance intervals, as well as the performance, safety, and longevity of your scooter and its components depend on the correct and timely maintenance. If you use your *GRAVITY* in very adverse conditions, maintenance should be done more often.
Carry out the following preventive maintenance procedures with the adequate frequency. If you find that some of parts are not operating as they ought to, do not use the scooter until you have corrected the fault, replaced the part or taken the scooter to a specialized repair shop.
The various parts of a scooter have a useful life that is shortened by wear, stress and fatigue.
Fatigue is caused by small forces repeated over and over again, which may cause the parts to break. The useful life of different parts varies according to their design, material, use and maintenance.
The following are all signs of fatigue in a scooter: dents, cracks, scratches, bent areas and discolored areas.
9.1 **Wheels**. CHECKS TO BE MADE: Every time you take your scooter out check that the quick release of the rear

very sharp and can cut you. Do not touch the disk or the brakes when they are hot or still turning. Disk brakes use a highly corrosive brake fluid. Avoid contact with skin and the scooter, as it will corrode the paint.
Mechanical disk brakes or V-Brake. This brake system comprises: brake lever, brake cables and sleeves, disk brake pads, disk brake disk/disk brake bodies. CHECKS TO BE MADE: After riding the scooter squeeze the brake lever tightly 10 times. The lever should not touch the handlebar. If it does, the brake system should be bled. The job requires specialist equipment and knowledge,should be carried out to specialized repair shop.
Check that there is no oil, grease or any other type of dirty on the disk.
Check the disk brakes for signs of wear once a month. If the pads are less than 1mm thick they should be replaced. You should also check that the pads are in the correct position, at a distance of between 0.25 and 0.75 mm from the disk when the brakes are not being applied.
Check the brake cables every month for twisted sections, rust, snapped threads and frayed ends and check that the edges of the sleeves are not bent, cut or worn. Replace any faulty parts in the system. Replacing parts requires specialist equipment and knowledge and should be carried out by a specialized repair shop.
Do not wash with pressurized water. Water may enter the cable and oxidize
ADJUSTMENTS: READ INSTRUCTIONS AND THE INFORMATION IN THE ATTACHED SUPPLIER'S MANUAL
DANGER: Disk brake disks and disk brake bodies can become very hot and burn the skin. The edges are also very sharp and can cut you. Do not touch the disk or the brakes when they are hot or still turning.
9.2 **Wood board, aluminum protection and mudguard.** The upper board is made of wood and covered with a nonslip surface. In the inner part of the chassis there is another wood board attached to the upper board by an anchorage system. The anchorage of the upper board is fixed and nailed to the wood.
To dismantle the boards, fix the anchorage of the upper board with an Allen wrench and loosen the screw of the bottom board.
Before you take the scooter out, carefully check the anchorage system and tighten everything that is loose.
APPROPRIATE FEET POSITION: The large size of the upper board allows you to place both feet on it at the same time. You must always place your feet correctly, just as it is shown below, and keep your knees bent to reduce the impact of the rough surface on your body and prevent possible back injuries.

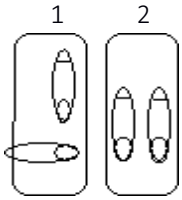
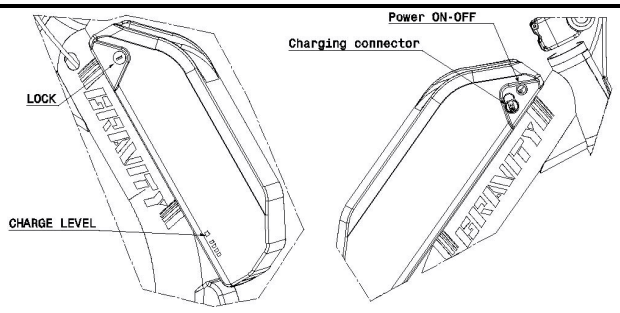


Figure 1 shows the ideal way to place your feet for descent. The front foot must be placed on the curved part of the wood with the chassis tube working as a limit. The back foot in a perpendicular position allows us to guide the board.
Figure 2 shows the way to place your feet for riding in a flat ground. This position allows us to row. Do not use this position for descent, as it will cause you to lose control of the scooter and fall.

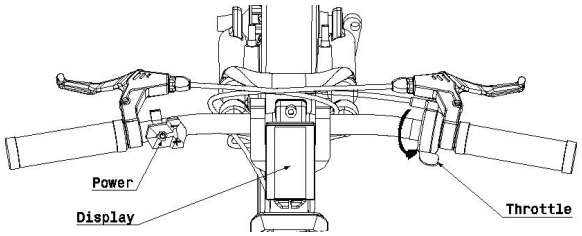
9.3 **The aluminum protection protects the chassi**s from blows and scratches. It is screwed to the board.
Before you take the scooter out, carefully check for exceeding metal parts or cutting edges.
9.4 **The mudguard prevents** the foot from touching the wheel. Screws fix it. Before you take the scooter out, carefully check the anchorage system and tighten everything that has come loose.

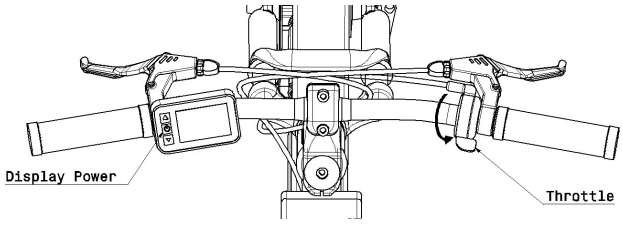
10. STARTING IN ELECTRIC MODE

10.1 Grip the scooter with one hand and with the other activate the "POWER" button on the battery.



10.2 Turn on the "Display" by pressing the "Display Power" button for three seconds. Once the "Display" is turned on and the information on the screen has stabilised the scooter is ready for use.





10.3 Grip the scooter with both hands on the hand grips.
10.4 Raise the kickstand, position 1 (Safety Rules diagram).
10.5 Accelerate by moving the "Throttle" lever down with your thumb (see Figure 10.2).
10.6 Once moving, place both feet on the board in a comfortable and balanced position, preferably in a surfer position with knees slightly bent.

11. BATTERY SAFETY INSTRUCTIONS AND WARNINGS FOR THE CORRECT USE OF BATTERIES

- You should read these Safety and Warning Instructions before using or charging your batteries.
- Failure to read and follow the instructions below may result in fire, personal injury and property damage. These batteries must be charged and used as indicated.
- Gravity Scooters, its distributors and its battery providers will not assume any responsibility in case of an accident caused by their batteries due to misuse, bad load or for not having followed all the safety measures and instructions indicated here.
- By purchasing these batteries, the buyer assumes all the risks associated with the batteries. If you do not agree with this condition, return the batteries immediately before use.

11.1 Battery charge.

11.1.1 The batteries can be charged as required, even if not fully discharged.
11.1.2 Use the original charger, which was originally supplied with the battery. In case you have batteries from different manufacturers or different voltage it is advisable to label the chargers and the charging ports of the batteries so as not to confuse them. Using an improper charger may cause a fire.
11.1.3 Charge the batteries in a dry place. Moisture and rain can cause chargers to malfunction.
11.1.4 Never leave the charging process unattended. While the Lithium batteries are charging, you must remain under constant observation to monitor the charging process and be able to react to potential problems that may arise.
11.1.5 Do not charge the battery for more than 6 hours. If after six hours the battery does not indicate that it is fully charged, it probably has a problem. Contact a specialized workshop to have the charger and battery checked.
11.1.6 Charge the batteries in an isolated area, away from any flammable material.
11.1.7 Before charging, wait for the batteries to cool to room temperature or leave them at rest for at least one hour.
11.1.8 When charging begins: firstly connect the charger to the power grid and secondly connect the battery to the charger.
11.1.9 After charging: firstly disconnect the battery charger and secondly disconnect the charger from the power grid.
11.1.10 Whether the charger is still hot after finishing the battery charging, it must be disconnected immediately and it must be reported to the supplier. It is very likely to be damaged. When charging is complete, the charger must automatically stop working and start cooling. If it is not and it continues to heat it means that it does not work properly and it can cause damage to the battery: overcharging, heating, fire and explosion.
11.1.11 It is advisable to charge the batteries outside the scooter, on a metal shelf, not far from an exit door. So in case of smoke, bad smell or fire you can push the shelf out of the enclosure and remove the affected battery.
11.1.12 In the case of having a fleet of electric scooters, it is advisable to choose the location of the batteries.
As a preventive measure in case of fire, check that there is nothing flammable in the cargo area and its surroundings. If the batteries catch fire they not only burn but explode, generate high temperatures, fumes, toxic gases and are difficult to extinguish. Choosing a right place and taking appropriate measures will minimize the damage of a fire.

11.2 Recommendations to extend the battery life:
11.2.1 Keep the scooter with the battery switched off.
11.2.2 Keep the battery charged, but not necessarily fully charged.
11.2.3 Recharge the battery every two months even if the scooter is not used.
11.2.4. Install a voltage regulator prior to the chargers. A surge in the power grid, caused for example by a storm, can damage the chargers.

11.3 Security Recommendations

11.3.1 The use of a programmable electric timer prior to the battery charger plugging (to prevent the batteries from being charged without surveillance) is recommended. In this way we can program the timer to let the current pass to the charger only at the time when there are people present who can monitor the charge of the batteries and avoid possible misses.

11.3.2 Installing a smoke detector in the cargo area is recommended.

11.3.3 Do not charge the batteries during a thunderstorm.

11.3.4 Have fire extinguishers at the entrance of the enclosure chosen to charge the batteries, not inside. Thus you will have a fire extinguisher near the spotlight and you will be able to access the extinguishers quickly without danger of burning. Never put out this fire with water. You can use soil, sand or CO2 extinguishers or other indicated extinguishers for electrical fires.

11.4 Storage and transport

11.4.1 Store the battery at room temperature between 4º and 30º C (degrees Celsius).

11.4.2 Do not expose the battery to the sun for prolonged periods of time.

11.4.3 Never store in a place where high temperatures can be reached. Do not charge or store batteries inside a vehicle exposed to the sun or similar. Extreme temperatures can cause the batteries to ignite. When transported or stored temporarily, the temperature can exceed 30ºC, but not more than 60ºC.

11.4.4 Store the batteries in a dry place.

11.4.5 Charge the battery for approximately 2 hours every 3 months. Even if the battery is not used.

11.5 General warnings

11.5.1 Excessive heat, smoke or a strong smell of chemical (similar to chlorine) are clear indications that something is not working well. Immediately disconnect the battery from the charger (if it is charging) or remove the battery from the scooter (if it is in use). Leave the battery in a safe place, with nothing flammable nearby, and observe it for half an hour If after this time the battery has cooled down, you can send it for repair.

11.5.2 Do not connect the positive (red) cable to the negative (black) battery cable under any circumstances.

11.5.3 Never open the battery case or charger, it is dangerous and you will immediately lose the product warranty.

11.5.4 In case of sending a battery to be repaired always send it together with its charger. In this way the technician can ensure the proper functioning of the entire equipment.

11.5.5 Keep the battery out of any heat source. Do not expose it to the sun or fire. Avoid using the battery in the rain or keeping it in places with high humidity.

11.5.6 Avoid puncturing or piercing the battery or the charger. Internal punctured elements can catch fire.

11.5.7 Maintaining the battery at temperatures above 80º C for prolonged periods of time (more than two hours) can cause damage to the battery and possibly burn them.

11.5.8 If for any reason you need to cut the power cables, it is necessary to do it with each cable independently. Make sure the wires do not touch each other. Otherwise a short circuit will occur and potentially cause the batteries to burn.

11.5.9 If at any time you notice that the batteries begin to swell (by increasing their volume) end the charging process immediately, disconnect the batteries and observe them in a safe place for a time of approximately 30 minutes. This can cause the liquid to drain from the battery. The reaction with the air can cause the ignition of the chemical components and produce fire. The chemical reaction may occur in a delayed manner; it is better to observe the battery as a precautionary measure. The observation of the battery should be carried out in a safe place, outdoors and away from any combustible material.

11.5.10 In case of fire, the evacuation of the building is more important than the fight against fire. Calling firefighters is essential. Staying safe and not breathing the fumes is more important than saving the property.

11.5.11 In case of fire do not put out the fire with water: use sand or a fire extinguisher.

11.5.12. OPERATING TEMPERATURES:

1. During the charging process: from 0 to 45ºC.
2. During the discharging proces: from 0 to 60ºC.
3. Let the battery cool to room temperature before charging it. From 4º at 30 ° C.
4. During handling and charging lithium batteries, never exceed 70ºC.

11.6 End of lifetime of batteries and chargers.

11.6.1 Batteries that have lost 25% of their charge capacity must be properly removed and disposed of. If it is not possible to verify it, you can calculate that this occurs between 800 and 1000 recharges.

11.6.2 To dispose of the old battery: Discharge the battery, secure the connection cables. wrap the battery in a bag and take it to a place for recycling.

11.6.3 Batteries and their chargers must be discarded at the same time. Do not store old chargers.

11.6.4 The product consists of various components and various materials that must be recycled or deposited in the corresponding places of debris removal Both when the product's lifetime has ended up or when for other

reasons it is necessary to dispose of it. To this, the end user who acquires the product must know the regulations in force in each municipality and / or locality based on the waste of electrical and electronic equipment.
11.6.5 The user who purchases this product must be aware and responsible for the potential hazards of the components on the environment and on human health, as a consequence of hazardous substances.
11.6.6 Never deposit the product in a conventional container of citizen scope without prior dismantling and knowledge of the components it incorporates.
11.6.7 If the procedure to be followed is unknown, check with your city council for more information.

11.7 Responsibilities.

11.7.1 Failure to observe the warnings and instructions in this manual may cause damage to the battery and consequently: accidents, serious injuries or death.
11.7.2 Failure to comply with the instructions contained in this manual is the responsibility of the battery user.
11.7.3 Use in conditions other than those described here could cause damage to the battery and even an accident.
11.7.4 The user of this product recognizes and accepts the risks associated with the use of these batteries that include, but are not limited to, the risk of breakage of any part or component that could cause accidents, serious injuries or death. Buying and using this product, the user expressly and voluntarily acknowledges and accepts these risks of active or passive negligence of GRAVITY Scooters, or hidden, latent or manifest defects of the product. The user also accepts to exempt GRAVITY Scooters SL and its distributors and resellers from any responsibility for possible damages within the limits provided by law.

12. OPTIMISING THE BATTERY AND TIPS FOR ELECTRIC USE

To save battery power and avoid overheating the engine and the controller:
12.1 Start the scooter with foot assistance, then once the scooter is moving apply the throttle.
12.2 When travelling downhill, allow to free wheel without accelerating once the desired speed is obtained.
12.3 Alternate intervals of motoring with others in which the scooter free wheels.
12.4 Assist motor with propulsion kicks on sharp inclines or during acceleration. This saves a lot of battery power and gives some exercise.
12.5 Stop applying the throttle and maintain speed with small accelerations once optimal speed is reached.
12.6 We can save energy by not accelerating more than the engine asks. We will notice that before a climb the scooter does not reach its maximum speed, but goes a little slower. At this time instead of giving gas to the maximum we have to lower the intensity of the gas until we notice that the scooter really starts to slow down due to the little gas we give it and not to the ascent. At this point we will increase the gas intensity a bit and this will be the point of lowest consumption and maximum possible speed.
The batteries perform better at temperatures between 20°C and 30°C than between 0°C and 10°C. This means performance in winter may be inferior, which is not due to sudden battery aging but physical factors.
To prevent the charger from getting hot and wearing out early: When the battery is charging place the charger in a cool place, with good ventilation. Do not cover.
Do not accelerate when the scooter is in reverse. This can damage the motor, wear it out and cause loss of power. Do not force the motor by accelerating on excessive inclines or by carrying excessive weight. Risk of burning out the motor or causing premature wear.

13. METHODOLOGY OF STORAGE AND TRANSPORTATION

13.1 The scooter must be stored in a dry place at temperatures between + 50 ° C and -10 ° C, protected from the sun.
13.2 The battery must be partially charged and recharged every two months even if it is not to be used.
13.3 The scooter can be carried with the battery disassembled or without disassembling. In both cases we have to make sure that the battery is totally protected against blows.
13.4 If it is convenient to dismantle the wheels to transport the scooter, we must protect the chassis against possible scratches against the brake discs of the wheels.
13.5 Hydraulic disc brake calipers, when dismounting the scooter wheel, must be protected with the plastic separator for brake pads or with a piece of cardboard, wood, plastic, etc. that prevents the pads from closing completely by the drive of the brake lever.

14. WARRANTY

The guarantee covers any equipment or manufacturing defect, with the replacement of defective parts with compliant parts for the same use.
Modification of any part of the scooter, including the chassis, fork and other components may make your scooter unsafe and means that the scooter no longer meets our specifications, therefore voiding its guarantee.
CAUTION: Never modify the chassis assembly. Do not carry out any sanding, drilling, filing or any other operation that could damage the chassis.

APPLICATION OF THE GUARANTEE:

- No impacts: the product must show no signs of damage due to abnormal conditions of use.
- The product must be used in accordance with its operating instructions.
- Original parts have not been replaced.

THE GUARANTEE DOES NOT COVER:

- Damage engaging the liability of a third party or resulting from an intentional fault.
- Damage resulting from maintenance and use not in accordance with the manufacturer's recommendations or negligence.
- Wear parts (bulbs, cables and cable casings, brake pads, rims, tires, inner tubes, inside guards, etc.).
- Damage resulting from fire, lightening, storm, vandalism or unsecured transport.

DURATION OF THE GUARANTEE:

- 5 years for the frame and boards from the date of the purchase.
- 2 years for components from the date of the purchase.
- 1 year for electrical components.
- 1 year for the battery.

15. DISPOSAL OF THE SCOOTER

15.1 The product is made up of various components and various materials that should be recycled or otherwise deposited in the appropriate places of disposal when the product's life has ended or upon disposal for other reasons. When disposing of the product, the end-user who acquired the product is required to comply with the regulations in each local authority area and/or location as applicable to the disposal of electrical and electronic equipment.

15.2 The purchaser of this product must be aware of and take responsibility for the potential hazards which the product’s components may cause to the environment and human health, due to hazardous substances.

15.3 Never place the product in a conventional rubbish container without prior dismantling and knowledge of its components.

15.4 If you do not know the proper procedure to be followed, check with your local council for more information.

16. CONFORMITY DECLARATION CE

We declare under our sole responsibility that the team:
Brand name: GRAVITY SCOOTERS SL
Year of construction: 2019
Country of Manufacture: Spain

Equipment Description:	TYPE	MODEL
Off-road scooter with power-assisted propulsion eléctrico	Motor 500w 36v	M10 -e
	Motor 1000w 48v	DH Core -e
		DH Core Air -e

It complies with the essential requirements of the directives:

- Conform declaration model EN 17050.
- Machinery Safety Directive 2006/42 / CE.

Deutsch [German]: Hiermit erklärt Gravity Scooters SL., dass sich das Gerät “ELECTRIC SCOOTER” in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

English: Hereby, Gravity ScootersSL., declares that this “ELECTRIC SCOOTER” is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español [Spanish]: Por medio de la presente Gravity Scooters SL. Declara que el “ELECTRIC SCOOTER” cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la directiva 1999/5/CE.

Français [French]: Par la présente Gravity Scooters SL., déclare que l'appareil “ELECTRIC SCOOTER” est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Italiano [Italian]: Con la presente Gravity Scooters SL., dichiara che questo “ELECTRIC SCOOTER” è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Português [Portuguese]: Gravity Scooters SL., declara que este “ELECTRIC SCOOTER” está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

You can consult the updated CE declaration of conformity on our website: www.gravity-scooters.com
Technical File prepared by: Gravity Scooters SL
Person responsible for signing this declaration: Judith García Pares, director of Gravity Scooters SL.

Place and date: Mediona (Barcelona) (Spain) November 11, 2019.

Signature and stamp:

GRAVITY SCOOTERS S.L.
Anselm Clavé 43, 08773 Mediona (Barcelona)
CIF. B66066713
TEL: 93 898 54 33

17. DATA OF THE TECHNICAL SERVICE.

(Data to be completed by the seller)
Name:
VAT-No:
Address:
Phone:
e-mail:

MANUFACTURER.

GRAVITY SCOOTERS S.L.
Anselm Clavé 43, 08773 Mediona (Barcelona) SPAIN.
Info@gravityfreescooters.com

18. ELECTRICAL KIT DATA:

- Brand: Gravity Scooters.
- Model: kit 500w 36v.
- Serial number: .....
- Year of construction: 2017
- Weight of kit: 5Kg.
- Motor power: 500W.
- Battery: 14,2 Ah.
- Voltage :36v.
- Maximum noise : 70dB.
- Maximum speed. 25 km /h