Afiscooter-C User Manual







WARNING

Read the User Manual carefully before operating AFISCOOTER C.

If you do not fully understand any part of this manual, please contact your dealer or any of our Service Centres.

Read this manual step by step, as injury or damage may occur from misuse!

WARNING

Electromagnetic Interference ("EMI") can cause powered vehicles to behave erratically, which could be dangerous to the user.

For your safety and protection, it is IMPERATIVE that you take time to read Chapter 10 ("EMI WARNING") before operating **AFISCOOTER C**.

Serial Number and Manufacturer's data are fixed at the front, on the plastic mud guard cover on the metal label of **AFISCOOTER C**.

WARRANTY

AFIKIM ELECTRIC VEHICLES strives continuously to improve its products, their quality and reliability, in constant effort to ensure its customers' satisfaction as well as its place in the market.

Warranty for *AFISCOOTER C* is subject to your local distributor's warranty.

Date: September 2014 (ECO-14-27)

Edition: 02 Revision 01

Products: AFISCOOTER C, 4-Wheel and 3-Wheel

P/N of the user manual: PRC4001

CONTENTS

CHAPTER 1 – OVERVIEW OF AFISCOOTER C (MAIN FEATURES)	4
CHAPTER 2 – SAFETY SYMBOLS FOR AFISCOOTER C	5
CHAPTER 3 – SAFETY INSTRUCTIONS FOR AFISCOOTER C	10
CHAPTER 4 – GENERAL DESCRIPTION OF AFISCOOTER C	19
CHAPTER 5 – ADJUSTMENT INSTRUCTIONS	21
CHAPTER 6 – OPERATING INSTRUCTIONS	22
CHAPTER 7 – CHARGING AFISCOOTER C BATTERIES	26
CHAPTER 8 – MAINTENANCE	27
CHAPTER 9 – TROUBLESHOOTING AND REPAIR	29
CHAPTER 10 – EMI WARNING	30
Appendix A – Specification Sheet	31

CHAPTER 1 – OVERVIEW OF AFISCOOTER C (MAIN FEATURES)

Congratulations on choosing **AFISCOOTER C** as your electrically powered scooter. **AFISCOOTER C** is a scooter for elderly and disabled persons, and for fun and sport.

Scooter classification: Class B in accordance with EN12184.

AFISCOOTER C is designed for a maximum occupant mass of up to 135kg (300 lbs, 3W) / 150kg (330 lbs, 4W). (See details in page 12).

AFISCOOTER C is an indoor/outdoor scooter designed to work in normal environmental conditions from very cold temperatures (-30°C/-22°F) to very hot temperatures (+45°C/+113°F).

AFISCOOTER C will operate in light rain showers, but extended use is not recommended in heavy rain or snow.

AFISCOOTER C is easy to operate. The relatively large wheels allow the user drive on unpaved roads, over moderately rough terrain and over obstacles as high as 4" (10 cm). Refer to Appendix A: Specification Sheet (Page 30) for the required tire pressure. **AFISCOOTER C** can climb slopes with angles and loads as detailed in Figure A: Maximum Recommended Incline Angles (Page 11).

The AFISCOOTER C maximum safe slope is: 9° (16%). (See page 12)

The braking system stops **AFISCOOTER C** smoothly and within a short distance after the throttle control lever is released.

A standard handbrake is also provided for backup. (Option)

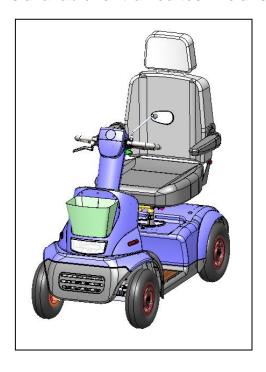
AFISCOOTER C is equipped with both front and rear shock absorbers to give the user a comfortable and smooth drive, even when using the vehicle on moderately rough roads. The seat is spacious and comfortable, and can be rotated for easy access (standard seats). It can be adjusted forward and backward, and up and down by a technician. All controls are conveniently mounted on the tiller and are simple to operate.

Under normal conditions, *AFISCOOTER C* can travel approximately 40 km (27 miles) before the batteries require recharging.

After reading through this entire manual and before using **AFISCOOTER C**, do a visual check of all the parts of the vehicle, to make sure that there is no visible damage. If you have any questions or concerns, contact your dealer.

AFISCOOTER C was developed to use maintenance-free sealed batteries only.

A Maintenance Manual is available for trained technicians.



CHAPTER 2 – SAFETY SYMBOLS FOR AFISCOOTER C



WARNING! An authorized supplier or qualified technician must perform the initial setup of this scooter, and must perform all of the procedures in this manual.

The symbols below are used throughout this user's manual and on the scooter to identify warnings and important information. It is very important for you to read them and understand them completely.



WARNING! Indicates a potentially hazardous condition/situation. Failure to follow designated procedures can cause either personal injury, component damage, or malfunction. On the scooter, this is a triangular black symbol.



MANDATORY! These actions must be performed as specified. Failure to perform mandatory actions can cause personal injury and/or equipment damage. On the scooter, this is a white symbol on a dark background.



PROHIBITED! These actions are prohibited. These actions must not be performed at any time or under any circumstances. Performing a prohibited action can cause personal injury and/or equipment damage. On the scooter, this is a black symbol with a circle and slash.



Please note and strictly adhere to the following Safety Instructions. Additional Warnings and Notices are printed in this user manual; it is imperative that you read carefully all chapters of this manual before operating *AFISCOOTER C*. It is also advisable to refresh your memory by rereading this manual periodically.



Get acquainted with **AFISCOOTER C** and its operational features before driving it.

Drive slowly (speed limit dial set to MIN) until you get used to **AFISCOOTER C**, its various functions, safety features, and to its braking capabilities and limitations.



Watch carefully for pedestrians and drive your **AFISCOOTER C** accordingly. In crowded areas, always drive with the speed limit dial set to MIN. Drive only where permitted according to all applicable local laws and ordinances. **AFISCOOTER C** is 66 cm (26") wide. Take great care not to hit persons or any objects around the vehicle.



Never remove any of the *AFISCOOTER C* **safety** parts such as fenders, plastic covers or emergency brake lever.

Never remove any of the **Warning labels.** If any of the Warning labels is removed, gets worn off or painted over, etc. ask your dealer to supply you with a new label.



Never put your hands, fingers, or legs into any moving parts or under any protective cover, since moving parts and hot surfaces are under those covers.



When making adjustments (folding the seat back, adjusting the armrest, moving the seat forward or backward, adjusting the tiller distance), as well as when squeezing the throttle control lever or handbrake, always take care that your hands and fingers are not trapped between any of the moving parts.

When moving the tiller forward or backward, be careful not to trap your fingers in the mechanism.



Never load *AFISCOOTER C* with more than 135kg (300 lbs, 3W) or 150kg (330 lbs, 4W) (see details in page 12) total load (user weight and all other loads combined, including baskets).

The load in the rear basket must not exceed 8 kg (17.6 lbs). The load in the front basket must not exceed 5 kg (11 lbs). **AFISCOOTER C** is designed to carry ONE person only on the Single Seat model. Never operate it with an additional person on board, including a child.



Never inflate the **AFISCOOTER C** tires more than the manufacturer's recommended pressure, shown on the tires.



Never use AFISCOOTER C on stairs.

Never try to go over an obstacle that is more than the maximum recommended slope angle and obstacle height given in the specification sheet. When driving over an obstacle, always drive so that the front of **AFISCOOTER C** is facing the obstacle.



If for any reason **AFISCOOTER C** does not stop when you release the throttle control lever, or takes longer to stop than it should (3 meters on a level surface), immediately use the handbrake to stop **AFISCOOTER C**, turn the main key switch to OFF, and contact your dealer.



Do not use **AFISCOOTER C** in heavy rain or extreme humidity, or at temperatures below -30°C (-22°F) or above +45°C (+113°F).



The seat weighs 21 kg (46 lbs). Each battery weighs a minimum of 14 kg (31 lbs). Be careful when lifting the seat and the batteries. See instruction for lifting the seat and the batteries in Chapter 8: Maintenance, and Chapter 9: Troubleshooting and Repair. Always lift using your knees and legs, not your back.



If **AFISCOOTER C** is involved in any kind of an accident in which parts are damaged, you must get a qualified technician to examine it before continuing to use it.



Batteries contain lead and acid, which is very corrosive. Batteries must be disposed of in accordance with proper procedures.



When driving, always make sure that the backrest is in its fully upright position.



Use lead acid maintenance-free sealed batteries only.



<u>WARNING!!!</u> Special care must be taken to prevent children from operating **AFISCOOTER C**.

Do not allow unsupervised children to play near **AFISCOOTER C** scooter while the batteries are charging.



Always drive carefully. Adjust your speed according to road conditions. When turning at high speed, *AFISCOOTER C* can become unstable. Before making sharp turns, reduce speed to minimum to prevent roll-over.



AFISCOOTER C is able to go up slopes higher than the recommended safe slope. However, do not drive on slopes whose incline you do not know. Always drive very slowly and do not drive on the side of such slopes. Before starting to drive, make sure your emergency brake operates properly.



Do not release either the manual or the manual release lever of the electromagnetic brake (EMB) when *AFISCOOTER C* is on a slope. When on any sort of an incline, never place *AFISCOOTER C* in freewheel mode while seated on it or standing next to it.



The lights of **AFISCOOTER C** should be on when visibility is reduced, day or night.



Since your seat upholstery is fire resistant, do not cover it or replace with any upholstery other than upholstery of the same kind.
When removing the battery cover, watch out for hot parts. The motor, axle, EMB, electronic cards and electronic controller might be hot, Do not touch them until you have checked their temperature.



Make sure your fingers are not squeezed between the levers and the rubber grip.



Do not use a cell phone, walkie-talkie, laptop, or other radio transmitter while operating **AFISCOOTER C**.



Removal of the grounding prong can create electrical hazard. If it is necessary to use a 2-pronged electrical outlet, properly install an approved 3-pronged adapter.



Do not connect an extension cord to the AC/DC converter or to the battery charger.



Keep tools and other metal objects away from the battery terminals. Contact with tools can cause electrical shock. Do not sit on **AFISCOOTER C** when it is on any type of lift/elevation product.



Explosive conditions exist



Disposal and recycling: Contact your authorized dealer for information on proper disposal of your *AFISCOOTER C* and its packaging.



Wear safety glasses.



Contains lead.



The battery charger is for indoor use only.



Flammable material. Do not expose to open flame.



At the rear of **AFISCOOTER C** is the manual release lever of the EMB. When using this lever, be careful not to touch the internal surface of the motor, as it could be very hot and cause injury. See the warning label at the rear of the scooter near the lever.

CHAPTER 3 – SAFETY INSTRUCTIONS for AFISCOOTER C

GENERAL



MANDATORY! Do not operate your new **AFISCOOTER C** scooter for the first time without reading and understanding this user manual completely. Your **AFISCOOTER C** is a state-of-the-art life-enhancement device designed to increase mobility. We provide an extensive range of products to best fit the individual needs of the user. Please be aware that the final selection and

purchasing decision regarding the type of **AFISCOOTER C** scooter to be used is the responsibility of a user who is capable of making such a decision and of his or her healthcare professional (i.e., medical doctor, physical therapist, etc.).

The contents of this manual are based on the expectation that a mobility device expert has properly fitted the *AFISCOOTER C* scooter to the user and has assisted the prescribing healthcare professional and/or the authorized dealer to give instructions for the use of the product.

There are certain situations, including some medical conditions, where the user will need to practice operating *AFISCOOTER C* scooter in the presence of a trained attendant. A trained attendant can be defined as a family member or care professional specially trained in assisting a user in various daily living activities.

As you begin using your **AFISCOOTER C** scooter during daily activities, you will probably encounter situations in which you will need some practice. Simply take your time and you will soon be in full and confident control as you manoeuvre through doorways, on and off elevators, up and down ramps, and over moderately rough terrain.

Below are some precautions, tips, and other safety considerations that will help you operate *AFISCOOTER C* scooter safely.

MODIFICATIONS



We have designed and engineered your **AFISCOOTER C** to provide maximum mobility and utility. Under no circumstances should you modify, add, remove, or disable any feature, part, or function of your **AFISCOOTER C**.

WARNING! Do not modify your **AFISCOOTER C** in any way not authorized by the manufacturer. Do not use accessories if they have not been tested or approved by the manufacturer.

REMOVABLE PARTS



WARNING! Do not attempt to lift or move your **AFISCOOTER C** by any of its removable parts, including the armrests, seat, or shroud.

PRE-RIDE SAFETY CHECK



Get to know the feel of your **AFISCOOTER C** and its capabilities. We recommend that you perform a safety check before each use to make sure your **AFISCOOTER C** operates smoothly and safely.

Perform the following inspections prior to using your scooter:

- Check for proper tire inflation. Maintain but do not exceed the psi/bar/kPa air pressure rating indicated on each tire.
- ✓ Check all electrical connections. Make sure they are secure and not corroded.
- ✓ Check all harness connections. Make sure they are secured properly.
- Check the brakes.
- ✓ Check the battery charge.
- ✓ If you discover a problem, contact your authorized **AFISCOOTER C** dealer for assistance.

TIRE INFLATION



Your **AFISCOOTER C** is equipped with pneumatic tires. Check the tire pressure at least once a week. Proper inflation pressures will prolong the life of your tires and help ensure the smooth operation of your **AFISCOOTER C**.

WARNING! It is critically important that the psi/bar/kPa air pressure indicated on each tire is maintained at all times. Do not under-inflate or over-inflate

your tires. Under-inflation may result in loss of control, and over-inflation may burst the tire. Failure to maintain the indicated pressure rating at all times may result in tire and/or wheel failure.

WARNING! Inflate your scooter tires from a regulated air source with an attached pressure gauge. Inflating your tires from an unregulated air source could over-inflate them, resulting in a burst tire.

NOTE: If the tires on your AFISCOOTER C are marked with a psi rating only, use the following conversion formulas to find the bar or kPa rating:

 $bar = psi \times 0.06895$ $kPa = psi \times 6.89476.$

WEIGHT LIMITATIONS



Your scooter is rated for a maximum weight capacity. Refer to Appendix A – Specification Sheet for details.

MANDATORY! Stay within the specified weight capacity for your *AFISCOOTER* **c.** Exceeding the weight capacity voids your warranty. We will not be held responsible for injuries and/or property damage resulting from failure to

observe weight limitations.

WARNING! Do not carry passengers on your scooter. Carrying passengers on your **AFISCOOTER C** may result in instability.

INCLINE INFORMATION



More and more buildings have ramps with specified degrees of inclination, designed for easy and safe access. Some ramps may have turning switchbacks (180-degree turns) that require you to have good cornering skills on your **AFISCOOTER C** scooter.

- ✓ Proceed with extreme caution as you approach the downgrade of a ramp or incline.
- ✓ Take wide turns with your **AFISCOOTER C** scooter around any tight corners. If you do that, the scooter's rear wheels will follow a wide arc. Do not cut the corner short, and do not bump into or get hung up on any railing corners.
- ✓ When driving down a ramp, keep **AFISCOOTER C** scooter's speed adjustment set to the slowest speed setting to ensure a safely controlled descent.
- ✓ Avoid sudden stops and starts.
- ✓ Refer to Figure A to determine the maximum slope, depending on scooter speed.

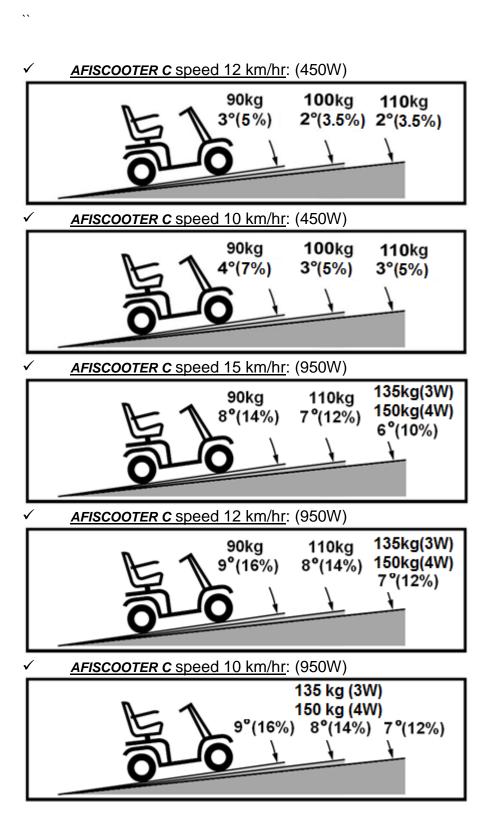


Figure A: Maximum Recommended Incline Angles

When driving up an incline, try to keep your **AFISCOOTER C** moving. If you must stop, start up again slowly, and then accelerate cautiously. When driving down an incline, set the speed switch to MIN and drive forward only. If your **AFISCOOTER C** starts to move down the incline faster than you want, allow it to come to a complete stop by releasing the throttle control lever, then push the throttle control lever forward slightly to ensure a safely controlled descent.

WARNING! When on any incline, never place **AFISCOOTER C** in freewheel mode while seated on it or standing next to it.

WARNING! When climbing an incline, do not zigzag or drive up at an angle. Always drive your *AFISCOOTER C* scooter straight up the incline. This greatly reduces the possibility of tipping over, or a fall. Always exercise extreme caution when climbing an incline.

WARNING! Do not drive your *AFISCOOTER C* scooter across an incline or diagonally up or down an incline; if possible, do not stop while driving up or down an incline.



WARNING! Do not drive up or down a potentially hazardous incline (e.g., areas covered with snow, ice, cut grass, or wet leaves).

WARNING!

Even though your *AFISCOOTER C* is capable of climbing slopes greater than those illustrated in Figure A, do not, under any circumstances, exceed the incline guidelines or any other specifications presented in this manual. Doing so could cause your *AFISCOOTER C* to become unstable. Note that public accesses ramps are not subject to government

regulation in all countries, and therefore do not necessarily have the same standard degree of slope. Other inclines may be natural or not be designed specifically for scooters. Figure A illustrates your *AFISCOOTER C*'s stability and its ability to climb including under various weight loads and under controlled testing conditions.

These tests were conducted with the **AFISCOOTER C**'s seat in the highest position and in its farthest rearward position. Use this information as a guideline. Your **AFISCOOTER C**'s ability to travel up inclines is affected by your weight, scooter speed, your angle of approach to the incline, and your **AFISCOOTER C** setup.

WARNING! Any attempt to go up or down a slope steeper than shown in Figure A may make your *AFISCOOTER C* unstable position and cause it to tip.

WARNING! Never carry an oxygen tank weighing more than 6.8 kg (15 lbs). Never put more than 5 Kg (11 lbs) in the front basket or more than 8 Kg (17.6 lbs) in the rear basket.

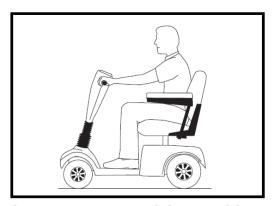






Figure C. Increased Stability Drive Position

When you approach an incline, it is best to lean forward. **See Figures B and C**. This shifts the centre of gravity of you and your **AFISCOOTER C** towards the front of the **AFISCOOTER C** for improved stability.

NOTE: If the throttle control lever is released while you are moving forward up a ramp, AFISCOOTER C may roll back approximately 30 cm (1 foot) before the brake engages. If the throttle control lever is released while you are moving in reverse, AFISCOOTER C may roll back approximately 1 meter (3 feet) before the brake engages.

CORNERING INFORMATION

Excessively high cornering speeds can result in tipping. Factors that affect the possibility of tipping include, but are not limited to, cornering speed, steering angle (how sharply you are turning), uneven road surfaces, inclined road surfaces, riding from an area of low traction to an area of high traction (such as passing from a grassy area to a paved area – especially at high speed while turning), and abrupt changes of direction. High cornering speeds are not recommended. If you feel that you may tip over in a corner, reduce your speed and steering angle (i.e., lessen the sharpness of the turn) to prevent your *AFISCOOTER C* from tipping.

WARNING! When cornering sharply, reduce your speed and maintain a stable centre of gravity. When using your *AFISCOOTER C* at higher speeds, do not corner sharply. This greatly reduces the possibility of a tip or fall. Always exercise your common sense when cornering.

BRAKING INFORMATION

Your **AFISCOOTER C** scooter is equipped with two powerful braking systems:

- ✓ Regenerative: Uses electricity to rapidly slow the vehicle when the throttle control lever returns to the centre/stop position.
- ✓ Park Brake: Activates automatically after regenerative braking slows the vehicle to a near stop, or when power is removed from the system for any reason.

OUTDOOR DRIVING SURFACES

- Your **AFISCOOTER C** is designed to provide optimum stability under normal driving conditions, on dry, level surfaces of concrete, tarmac, or asphalt. However, we recognize that there will be times when you will encounter other surfaces. For this reason, your **AFISCOOTER C** is designed to perform well on packed soil, grass, and gravel. Feel free to use your **AFISCOOTER C** safely on lawns and in parks.
- Reduce your AFISCOOTER C speed when driving on uneven terrain and/or soft surfaces.
- ✓ Avoid tall grass that can become tangled in the running gear.
- ✓ Avoid loosely packed gravel and sand.
- ✓ If you feel unsure about a driving surface, avoid it.

PUBLIC STREETS AND ROADWAYS

WARNING! Do not operate your *AFISCOOTER C* on public streets or roadways. It may be difficult for traffic to see you when you are seated on your *AFISCOOTER C*. Obey all local pedestrian traffic rules. Wait until your path is clear of traffic, and then proceed with extreme caution.

STATIONARY OBSTACLES (STEPS, CURBS, ETC.)



WARNING! Do not drive near raised surfaces, unprotected ledges, and/or drop-offs (curbs, porches, stairs, etc.).

WARNING! Do not try to go up or down an obstacle that is too high. **WARNING!** Do not try to go backward down any step, curb, or other obstacle. This may cause *AFISCOOTER C* to tip.

WARNING! Be sure your *AFISCOOTER C* scooter is travelling perpendicular to any curb you may be required to go up or down.

WARNING! Do not attempt to climb a curb that is higher than 10 cm (4").

PRECAUTIONS DURING INCLEMENT WEATHER

Avoid exposing your **AFISCOOTER C** scooter to inclement weather.

If you are suddenly caught up in rain, snow, severe cold or heat while operating your **AFISCOOTER C**, proceed to shelter at the earliest opportunity. Thoroughly dry your **AFISCOOTER C** before storing, charging, or operating it.

PROHIBITED! Do not operate your *AFISCOOTER C* in rain, snow, salt, mist/spray conditions, or on icy slippery surfaces, as this can have an adverse effect on the electrical system. Maintain and store your *AFISCOOTER C* in dry and clean conditions.

WARNING! Prolonged exposure to extreme hot or cold weather may affect the temperature of the *AFISCOOTER C* parts, possibly resulting in burns. Exercise caution when using your *AFISCOOTER C* in extremely hot or cold conditions or when exposing your *AFISCOOTER C* to direct sunlight for prolonged periods of time.

FREEWHEEL MODE



Locked weels Your **AFISCOOTER C** is equipped with a manual freewheel lever that, when pushed forward, allows **AFISCOOTER C** to be pushed. For more information about how to place your **AFISCOOTER C** in and out of freewheel mode, see Chapter 4 – General description of the **AFISCOOTER C**.

WARNING! When your **AFISCOOTER C** is in freewheel mode, the parking system is disengaged.



- ✓ Ensure the key is removed from the key switch.
- ✓ Stand beside *AFISCOOTER C* to engage or disengage freewheel mode. Never do this while sitting on *AFISCOOTER C*.
- ✓ After you have finished pushing your **AFISCOOTER C**, always return it to the drive mode to lock the brakes (pull the manual freewheel lever backward).
- ✓ An added feature built into the AFISCOOTER C is "push-too-fast" protection, which safeguards it against gaining excessive speed while in freewheel mode.

Push-too-fast operates in two different modes:

- ✓ If the key is in the OFF position while the **AFISCOOTER C** is in freewheel mode, the **AFISCOOTER C** scooter's controller activates regenerative braking when it is pushed faster than the pre-programmed maximum threshold. In this case, the controller is acting as a speed governor.
- ✓ If the key is in the ON position while the **AFISCOOTER C** is in freewheel mode, you will encounter considerable resistance at any speed. This prevents the **AFISCOOTER C** from gaining unwanted momentum should the freewheel lever be raised inadvertently while you are driving the **AFISCOOTER C** scooter.
- ✓ When using this lever, be careful not to touch the internal surface of the motor, as it could be very hot and cause injury. See the warning label at the rear of the scooter near the lever.

STAIRS AND ESCALATORS

AFISCOOTER C scooters are not designed to travel up or down stairs or escalators. Always use an elevator.

WARNING! Do not use your *AFISCOOTER C* scooter to negotiate stairs or escalators.

DOORS

- ✓ Determine whether the door opens toward or away from you.
- ✓ Use your hand to turn the knob or to push the handle or push-bar.
- ✓ If the door opens away from you, drive your **AFISCOOTER C** gently and slowly forward to push the door open.
 - If the door opens towards you, drive your **AFISCOOTER C** gently and slowly backwards to pull the door open.

ELEVATORS

Modern elevators have a safety mechanism on the edge of the door that, when pushed, reopens the door(s).

- ✓ If you are in the doorway of an elevator when the door(s) begin to close, push on the rubber door edge or allow the rubber door edge to contact the **AFISCOOTER C**; and the door will reopen.
- ✓ Take care that handbags, packages, or **AFISCOOTER C** accessories do not become caught in elevator doors.

NOTE: Sometimes manoeuvring your **AFISCOOTER C** may be difficult in elevators and building entrances. Use caution when attempting to manoeuvre your **AFISCOOTER C** in small spaces, and avoid areas that might pose a problem.

LIFTS/ELEVATION PRODUCTS

If you travel with your *AFISCOOTER C*, you may find it necessary to use a lift or elevation product to aid in transportation. We recommend that you closely review the manufacturer's instructions, specifications, and safety information before using the lift/elevation product. **WARNING!** Never sit on your *AFISCOOTER C* when it is being used with any type of lift/elevation product. Your *AFISCOOTER C* was not designed for such use, and any damage or injury resulting from such use your responsibility only.

BATTERIES (see also Replacing Batteries, page 26)



In addition to the following the warnings below, be sure to comply with all other battery handling information.

MANDATORY! Battery posts, terminals, and related accessories contain lead and lead compounds. Wear goggles and gloves when handling batteries, and wash hands after handling.

WARNING! Scooter batteries are heavy (see Appendix A – Specification Sheet). If you are unable to lift that much weight, be sure to get help. Use proper lifting techniques and avoid lifting beyond your capacity.

WARNING! Always protect the batteries from freezing and never charge a frozen battery. **WARNING!** Connect the battery cables correctly. RED (+) cables must be connected to positive (+) battery terminals/posts and BLACK (-) cables must be connected to negative (-) battery terminals/posts. REPLACE damaged cables immediately. Protective caps must be installed over all battery terminals.

NOTE: If the battery is damaged or cracked, immediately enclose it in a plastic bag and contact your local waste disposal agency or authorized **AFISCOOTER C** dealer for instructions for disposal or for recycling (which we recommend).

MOTOR VEHICLE TRANSPORTATION

The manufacturer recommends that you do not remain seated in your **AFISCOOTER C** while travelling in a motor vehicle. **AFISCOOTER C** should be stowed in the boot of a car or in the back of a truck or van with the batteries removed and properly secured. In addition, all removable **AFISCOOTER C** parts, including the armrests, seat, and shroud, should be removed and/or properly secured during transportation.

WARNING! Although your *AFISCOOTER C* scooter may be equipped with an optional tiedown belt, this belt is not designed to provide restraint during motor vehicle transportation. Anyone travelling in a motor vehicle must be properly secured in the motor vehicle seat with securely fastened seat belts.

WARNING! Do not sit on your *AFISCOOTER C* while it is in a moving vehicle.

WARNING! Always be sure your *AFISCOOTER C* and its batteries are properly secured when it is being transported. Batteries must be secured in an upright position, and protective caps must be installed on the battery terminals. Batteries must not be transported with any flammable or combustible items.

TIE-DOWN BELT (Optional)

Although your **AFISCOOTER C** scooter might be equipped with an optional tie-down belt, this belt is not designed to provide proper restraint during motor vehicle transportation. Anyone travelling in a motor vehicle must be properly secured in the motor vehicle seat with securely fastened seat belts.

WARNING! Do not sit on your **AFISCOOTER C** while it is in a moving vehicle.

WARNING! Ensure your *AFISCOOTER C* and its batteries are properly secured during transportation.

PREVENTING UNINTENDED TRAVEL

WARNING! If you anticipate being stationary for an extended period of time, turn off the power. This will prevent unexpected travel caused by accidentally touching the throttle control lever.

GETTING ONTO AND OFF YOUR AFISCOOTER C



Getting onto and off your **AFISCOOTER C** requires a good sense of balance. Please observe the following safety tips when getting on and off your **AFISCOOTER C C**:

- ✓ Remove the key from the key switch.
- ✓ Ensure that your **AFISCOOTER C** is not in freewheel mode (see Chapter 4 General description of **AFISCOOTER C** scooter).
- ✓ Ensure that the seat is secured in place.
- ✓ Pivot the armrests up

WARNING! Position yourself as far back as possible in the seat to prevent **AFISCOOTER C** from tipping and causing injury.

WARNING! Avoid putting all of your weight on the armrests, and do not make the armrests bear weight, such as during transfers. Such use may cause **AFISCOOTER C** to tip, resulting in a fall from **AFISCOOTER C** and/or personal injury.

WARNING! Avoid putting all of your weight on the floorboard. Such use may cause the **AFISCOOTER C** to tip.

REACHING AND BENDING

Avoid reaching or bending while driving your **AFISCOOTER C**. Bending forward creates the risk of accidentally contacting the throttle control lever. Bending to the side while seated creates the risk of tipping. It is important to maintain a stable centre of gravity to keep **AFISCOOTER C** from tipping. We recommend that you determine your personal limitations and practice bending and reaching in the presence of a qualified attendant.

WARNING! Do not bend, lean, or reach for objects if you have to pick them up from the **AFISCOOTER C** deck or from either side of **AFISCOOTER C**. Movements such as these may change your centre of gravity and the weight distribution of **AFISCOOTER C**, causing it to tip. **PROHIBITED!** Keep your hands away from the tires and wheels when driving. Be aware that loose-fitting clothing can be caught in tires and wheels.

PRESCRIPTION DRUGS/PHYSICAL LIMITATIONS

AFISCOOTER C user must exercise care and common sense when operating **AFISCOOTER C**. This includes awareness of safety issues when taking prescription / over-the-counter drugs, or when the user has specific physical limitations.

WARNING! Consult with your physician if you are taking prescription or over-the-counter medication or if you have certain physical limitations. Some medications and limitations may impair your ability to operate your **AFISCOOTER C** in a safe manner.

ALCOHOL/SMOKING





Users must exercise care and common sense when operating **AFISCOOTER C**. This includes awareness of safety issues while under the influence of alcohol, or while smoking.

WARNING! Do not operate your *AFISCOOTER C* while you are under the influence of alcohol, as this may impair your ability to operate *AFISCOOTER C* in a safe manner.

WARNING! The manufacturer strongly recommends that you do not smoke while seated on your *AFISCOOTER C*, although *AFISCOOTER C* seat has passed the necessary testing requirements for cigarette smoking. You must adhere to the following safety guidelines if you decide to smoke cigarettes while seated on your *AFISCOOTER C*.

- ✓ Do not leave lit cigarettes unattended.
- ✓ Keep ashtrays a safe distance from the seat cushions.
- ✓ Always make sure cigarettes are completely extinguished before disposal.

ELECTROMAGNETIC AND RADIO FREQUENCY INTERFERENCE (EMI/RFI)

WARNING! Laboratory tests have shown that electromagnetic and radio frequency waves can have an adverse effect on the performance of electrically powered mobility vehicles.

EMI/RFI can come from sources such as cellular phones, mobile two-way radios (such as walkie-talkies), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave signals, paging transmitters and medium-range mobile transceivers used by emergency vehicles. In some cases, they can cause unintended movement or damage to the control system. Every electrically powered mobility vehicle has an immunity (or resistance) to EMI.

The higher the immunity level, the greater the protection against EMI. This product has been tested and has passed at an immunity level of 20 V/M.

WARNING! Be aware that cell phones, two-way radios, laptops, and other types of radio transmitters may cause unintended movement of your electrically powered **AFISCOOTER C** due to EMI. Exercise caution when using any of these items while operating your **AFISCOOTER C** and avoid coming into close proximity of radio and TV stations.

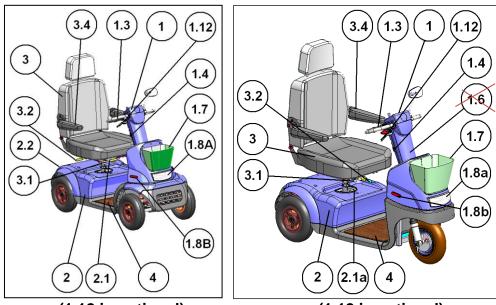
WARNING! The addition of accessories or components to an electrically powered mobility vehicle can increase its susceptibility to EMI. Do not modify your *AFISCOOTER C* scooter in any way not authorized by the manufacturer.

WARNING! *AFISCOOTER C* itself can interfere with other electrical devices located nearby, such as alarm systems.

NOTE: For further information on EMI/RFI refer to chapter 10 or ask your authorized dealer.

CHAPTER 4 – GENERAL DESCRIPTION OF AFISCOOTER C

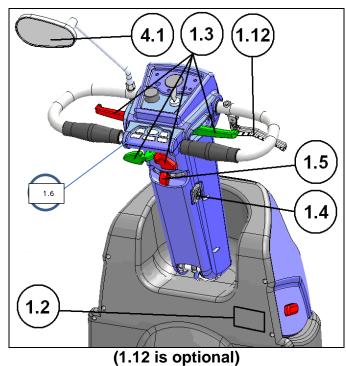
Note: The numbers in parentheses refer to the parts illustrated on Figures 1, 2, and 3.



(1.12 is optional)
Figure 1: AFISCOOTER C4

(1.12 is optional)

Figure 2: AFISCOOTER C3



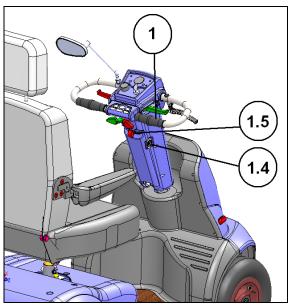
(1.12 is optional) Figure 3

T'II /II II I /A	N	
Tiller/Handlebars (1)	Your AFISCOOTER C is designed for either hand	
	operation, but it is delivered with right-hand controls.	
	Left-hand controls can be set up by your dealer.	
Plate with serial number	Serial number and manufacturer's data are on a plate,	
and manufacturer's data	on the mud guard, in front of your foot.	
(1.2)		
Throttle control lever (1.3)	Used to control speed and driving direction. Standard	
	is right hand forward, and left hand backward (may be	
	modified by your dealer on request).	
Charging socket (1.4)	Used to connect the charger plug to charge the	
	battery. Located on the right side of the handlebar.	
Handlebar adjustment lever	The handlebar can be adjusted forward or backward.	
(1.5)	Release the lever, make the adjustment, and return	
(1.0)	the lever to the locked position	
Buzzer (1.6)	The buzzer is mounted internally within the tiller	
Buzzer (1.0)	column.	
Front basket (1.7)	Maximum load: 5 kg (11 lbs).	
` '		
Headlight and blinkers (1.8)	(A) Headlight for poor visibility conditions.	
5 (0)	(B) Blinkers for turnings signals	
Battery cover (2)	Protects the power unit, electronics and batteries.	
Fuses (2.1a, 2.1b)	2.1a – Main fuses 50A – Semi Automatic	
	2.1b – Charge fuse 10A – Semi Automatic	
EMB manual release (2.2)	A manual release lever at the back of AFISCOOTER C	
WARNING!	lets you push or pull it. Refer to the section	
Hot surface!!	FREEWHEEL MODE on page 13 for details.	
CAUTION ON		
SLOPES!!		
▲ Free		
T weels		
Locked weels		
Saat (2)	AFICOCOTED Cocot is agreeined with falding agrees	
Seat (3)	AFISCOOTER C seat is equipped with folding armrests	
	(3.4) to allow convenient access to the seat. The seat	
	itself can be rotated to allow easy access.	
Seat forward/reverse lever	Used to move the seat forward and backward.	
(3.1)		
Seat rotation lever (3.2)	Used to swivel the seat 45° or 90° in either direction.	
Seat height adjustment	The seat height must be adjusted by a qualified	
	technician.	
Rear basket (optional)	Maximum load 8 kg (17.6 lbs).	
Armrests (3.4)	May be folded upwards.	
Floor (4)	Covered with carpet that may be removed for	
	cleaning.	
Mirror (4.1)	Every AFISCOOTER C has either 1 or 2 rear-view	
Will (T. 1)	mirrors.	
	111111013.	

CHAPTER 5 – ADJUSTMENT INSTRUCTIONS

(Numbers refer to Figures 4 and 5)

Adjusting the handlebars (1) (option)	 Adjust the position of the handlebars (height and distance) as follows: 1. Release the handlebar adjustment lever (1.5) (which locks the handlebars in place), by pushing it to the left. 2. Move the handlebars to the position you want. 3. Push the handlebar adjustment lever back to the locked position (to the right). 	
Seating in AFISCOOTER C	Before attempting to drive AFISCOOTER C , make sure the plug is disconnected from the charging socket (1.4).	
	Note: While the plug is in the charging socket, AFISCOOTER C cannot be operated.	
	Use the seat rotation lever (3.2) to rotate the seat sideways, and raise the armrest (3.4) to give you easy access to the seat. Use the seat forward/reverse lever (3.1) to adjust the location of the seat.	



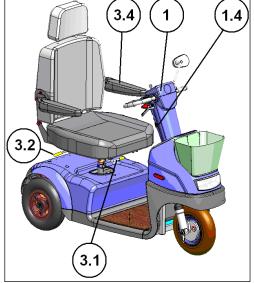
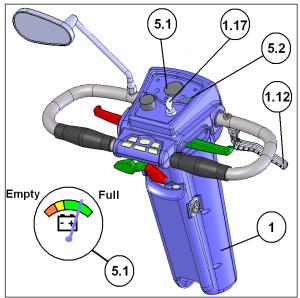


Figure 4: AFISCOOTER C4

Figure 5: AFISCOOTER C3

CHAPTER 6 – OPERATING INSTRUCTIONS



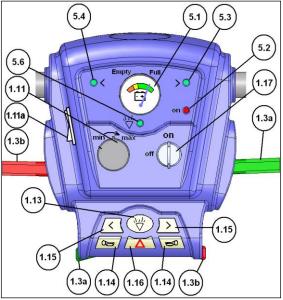


Figure 6 (1.12 is optional)

Figure 7

(Numbers refer to Figures 6 and 7)		
Key switch (1.17)	 The main key switch is located on the tiller panel at the top of the handlebar column (1). The key switch has two positions: OFF: The AFISCOOTER C cannot be driven and the EMB is locked. ON: Power is supplied to the AFISCOOTER C and the EMB is released automatically when the throttle control lever is squeezed. To operate the AFISCOOTER C, insert the key in the key switch and turn it to ON (clockwise). The switch will remain in this position and the green LED (5.2) will be lit. Note: The key switch is used to operate AFISCOOTER C, not for locking. 	
Automatic shut off (optional)	This is an optional feature. When the key switch is ON, after a period of time, during which the throttle control lever is not used (the period is programmed at the time the option is installed, and is usually 20 minutes), the control system will automatically shut off to save battery charge. In the case of automatic shut-off, turn the key switch OFF and then ON again.	
Battery status Indicator (5.1)	The battery status indicator is located on the tiller panel and shows you the remaining capacity of the batteries. Like petrol gauges in cars, the indicator is not absolutely accurate; it is merely a guide to help you stop running out of fuel. The accuracy of the indicator also depends on the type and age of the batteries. When the indicator is in the yellow area, recharge batteries as soon as possible. When the indicator is in the red area, recharge immediately. When the indicator is in the red, you can only drive a short distance (1-4 km on level surface).	
Fault indicator (5.2)	The ON LED indicator is also used as a fault indicator. When the LED is flashing, it blinks the fault code. (See Maintenance Manual for the codes).	

(Numbers refer to	Figures 6 and 7)
Adjusting the	The handbrake cable mechanism can be adjusted by an authorized
handbrake (1.12) AFISCOOTER C technician or dealer, or by any authorized pr	
	to adjust handbrakes mounted on bicycles or motorcycles.
	The handbrake is part of your safety system. DO NOT adjust it
yourself—get professional assistance!	
	The handbrake is optional.
Speed limit dial	The speed limit dial is located on the handlebar panel.
(1.11)	When the speed limit dial is set to MAX, AFISCOOTER C will drive at
	10 km/hr or 12 km/hr or 15 km/hr, depending on the model.
	 When the speed limit dial is set to MIN, AFISCOOTER C will drive at approximately 3 km/hr.
	Do not change the speed limit dial setting while <i>AFISCOOTER C</i> is
	moving.
	Note:
	Set the speed limit dial to MIN:
	Until you get used to driving your new AFISCOOTER C, and When
	driving AFISCOOTER C inside a building or in a crowded area
Full (1) - Half	Set the maximum speed of the scooter to half (1/2) or full (1) speed.
(1/2) Speed	Use the 1/2 speed mode when driving in close and crowded areas.
mode Switch	
(1.11a)	
Throttle control	To drive:
lever and manual	Gently squeeze the throttle control lever (1.3a or 1.3b, depending on
handbrake (1.12)	whether you want to drive forward or backward) until you reach the
	desired speed. Your speed is directly proportional to the deflection of
	the throttle control lever.
	Note:
	You can squeeze one side of the throttle control lever towards you, or you can push the other side away from you, to achieve the same
	effect. Use whichever method is most comfortable for you.
	To stop : Release the throttle control lever.
	AFISCOOTER C will stop gradually.
	Note: You can also use the manual handbrake for emergency
	stopping.
Indicator buttons	Before you turn, press the applicable indicator button. When a turn
(left and right)	indicator is activated, the applicable LED (5.3 or 5.4) will flash.
(1.15)	Depending on the model, a buzzer may also sound (subject to local
	regulations).
D 1 "	To turn off the indicator, press the button again.
Buzzer buttons	To activate the buzzer manually, push one of the two buzzer buttons.
(1.14)	The buzzer sounds automatically under the following conditions
	(except where prohibited by law, or where your AFISCOOTER C is modified by a trained technician; on request; contact your dealer for
	details):
	1. When reversing
	When operating the left or right indicator
	3. Alarm conditions generated by the controller
Button for	To turn on the lights (headlight and rear lights), press the Lights
headlight and	button. When the lights are on, the Light LED (5.6) is lit.
rear lights (1.13)	To turn off the lights, press the button again.

(Numbers refer to	Figures 6 and 7)
Hazard button (1.16) Lock-out while charging	The Hazard button activates the hazard lights (i.e., both indicators and the front and rear blinkers). When the hazard lights are activated, all three LEDs (5.3, 5.4, 5.6) flash. To turn off the hazard lights, press the button again. When AFISCOOTER C is being charged it is in lock-out mode. In this mode it cannot be driven.
After stopping	After stopping AFISCOOTER C , turn the key switch (1.17) to OFF and remove the key. The green LED will turn off. Note: The EMB locks automatically when the throttle control lever is released and AFISCOOTER C has come to a complete stop.
Safe driving	When driving on ramps, high curbs and on sharp turns, drive very slowly and carefully, preferably with the speed set to MIN. When going up or down a step, always drive so that the wheels are fully perpendicular to the step, and both of the rear wheels meet the step at the same time. Never try to go on an obstacle that is more than the maximum recommended slope or curb height (see the stabilities and the obstacle climbing specifications given in Appendix A – Specification Sheet) Always drive carefully and adjust your speed to the road conditions. Before making sharp turns, reduce speed to minimum, to prevent side roll-over.
Climbing an obstacle	To climb an obstacle, drive AFISCOOTER C forward toward the obstacle until the front wheel touches the obstacle, then, maintaining your direction, increase speed.
Driving on slopes and turns	Before making sharp turns, particularly on inclines, reduce speed to minimum, to prevent side roll-over. **AFISCOOTER C** is able to go up slopes steeper than the recommended safe slope. Do not drive on including where you are not sure about the degree of slope. Always drive very slowly on inclines, and be sure not to approach the incline side-on (fully forward only).
Prior to use	After reading through this entire manual and before using the AFISCOOTER C , do a visual check of all the vehicle parts, to make sure that there is no visible damage. If you have any questions or concerns, contact your dealer.
Controller programming	Several parameters of AFISCOOTER C controller can be programmed. Programming must be done by a trained authorized technician only. Incorrect programming can cause abnormal operation of the AFISCOOTER C and may result in damage and personal injury.

(Numbers refer to Figures 6 and 7)			
Performance check	A performance check is highly recommended when you first receive your <i>AFISCOOTER C</i> , or after a period of not using <i>AFISCOOTER C</i> , as follows: 1. Turn on the key switch. 2. Verify that both the green ON LED and the battery status indicator are lit. 3. Slowly squeeze the drive control lever and verify that <i>AFISCOOTER C</i> travels at a speed that corresponds to the degree to which you are squeezing the lever. 4. Release the throttle control lever and verify that <i>AFISCOOTER C</i> stops smoothly, and that you hear the click of the EMB engaging.		
	5. Check that all the buttons on the handlebar work correctly.6. Switch off the key switch.Your <i>AFISCOOTER C</i> is now ready to drive.		
Prior to use	Before using <i>AFISCOOTER C</i> , be sure you know your own weight and the weight of any items you will be carrying on it. The maximum total load is 135 kg (297 lbs) /110 kg (242 lbs). (Depending on the model).		
Seat belt	Use a seat belt whenever it is needed or as required by local traffic regulations.		
Transportation	To reduce the height of AFISCOOTER C while transporting it, the seat can be removed as explained in Chapter 8, Maintenance, and the handlebar column can be folded flat.		
Securing AFISCOOTER C in motor vehicle for transportation	To transport <i>AFISCOOTER C</i> in a motor vehicle, it must be secured (see Figure 8). Using standard approved tiding straps, secure the 4 tiding ear plates painted in Yellow (2 at the front and 2 at the rear of the scooter), to the car secure hooks. Warning: When transporting <i>AFISCOOTER C</i> , never let anyone sit on it.		
	scooter tide ears hooks		
	Figure 8		

CHAPTER 7 – CHARGING AFISCOOTER C BATTERIES

Read the charger manual before using it.

Warning: If you use a charger other than the one supplied with your AFISCOOTER C, ask your dealer for instructions.

CHARGING BATTERIES (see Figure 9)

- 1. Insert the charger plug (8) in the charging socket (10) located on the right side of the tiller column.
- 2. Plug the charger power cord (9) into a wall socket (11).
- 3. When charging is complete, remove the charger power cord (9) from the wall socket (11) and then remove the charger plug (8) from the charging socket (10).
- 4. Under ideal storage conditions, batteries that were charged to full capacity and were not used should be recharged every 6 months.
- 5. If you expect not to use your *AFISCOOTER C* for an extended period of time, we recommend charging it for two days and then disconnecting the batteries.
- 6. If you have not used your **AFISCOOTER C** for an extended period of time, charge the batteries for at least 24 hours before driving.
 - Note: There is NO need to disconnect the charging plug immediately after the charging is complete.
 - However, DO NOT leave the charger connected to the batteries FOR MORE THAN TWO WEEKS.
 - As long as the charging plug is in the charging socket, the electronic control of AFISCOOTER C automatically cuts all power to the electric system and it cannot be driven.
 - The charger supplied is suitable for charging lead acid dry/gel batteries. Use only the defined type of charger. Before using any other type of charger, check with your dealer.

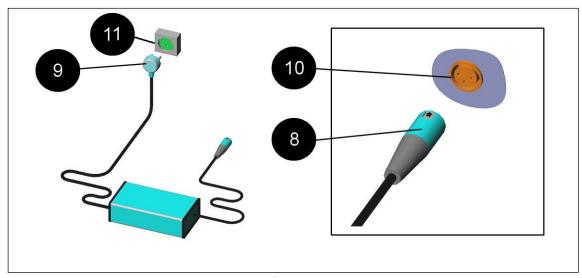


Figure 9

CHAPTER 8 – MAINTENANCE

Note:

A Maintenance Manual is available for trained technicians.

Although **AFISCOOTER C** requires very little maintenance, do not neglect it. When performing maintenance procedures on **AFISCOOTER C**, make sure that it stands on a level surface and that the key is not inserted.

This chapter contains both periodic maintenance procedures and maintenance procedures to be performed as required.

Periodic Maintenance Procedures

✓ Remark: For periodic maintenance, no special tools are needed.

1 Check for missing and damaged parts (see Figures 1 through 4). 2 Check air pressure in all tires. 3 Replace batteries • Every 2-3 years, • After about 300-400 full cy • When the distance you ca	ency
tires. 3 Replace batteries • Every 2-3 years, • After about 300-400 full cy • When the distance you ca	TER C or after a long time
 After about 300-400 full cy When the distance you ca 	
becomes short, or • After a technician recomm	n travel on a single charge

Note: To replace the batteries, the seat and the battery cover (which is located under the seat) must be removed.

As-required Maintenance Procedures

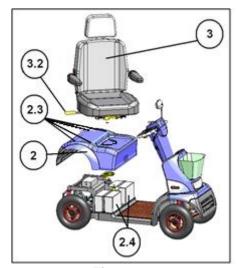


Figure 10

(Numbers refe	(Numbers refer to Figure 10)			
Removing the	Turn the seat by turning the lever (3.2) 45° (either direction). The seat can			
seat (3)	be removed only at this angle.			
	Hold the seat with one hand on the backrest, and the other at the front.			
	Lift it off the seat-mounting post.			
	Warning! The seat weighs 21 kg (46 lbs). Bend your knees and lift			
	with your legs, not your back.			

(Numbers refe	(Numbers refer to Figure 10)			
Removing	To remove the battery cover, unscrew the screws (2.3) holding it in place,			
and replacing	then lift it until it clears the seat-mounting post (4).			
the battery	To replace the battery cover, re-install it over the seat-mounting post and			
cover (2)	make sure it is seated properly, then secure it with the screws.			
Tires	Correct tire pressure is essential for steering and stability. Check the tire pressure every two weeks (25±2 psi).			
Cleaning	Use only a damp cloth and mild detergent for cleaning. Never use a hose, as this may severely damage the power and electronic components.			
Replace	Note! Batteries must be replaced by trained professionals only.			
batteries	Warning! Batteries contain high energy and can spark, resulting in a possible fire hazard.			
	Warning! Working with batteries can cause damage and Injury if not done properly.			
	In this procedure, refer to Figure 11.			
	Remove the terminal insulating cap from one battery terminal.			
	2. Using an 8 mm key, unscrew the wiring from the terminal. Take care not			
	to let the key touch any other terminal or metal part, as this could cause damage or injury.			
	3. Repeat steps 1 and 2 for all the other terminals.			
	4. Remove the old batteries and install the new ones.			
	5. Connect the wires of the new batteries as shown in Figure 11 (also shown on the label located near the batteries).			
	6. Screw down the terminals securely, and replace the insulating caps.			

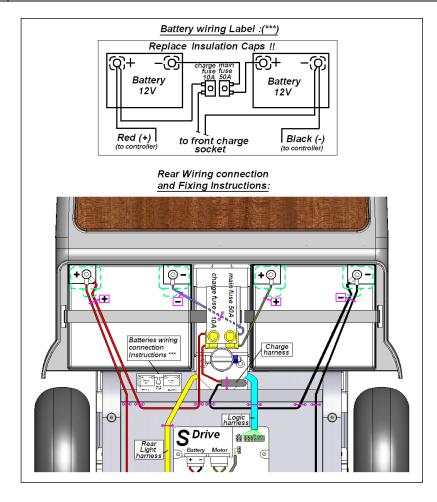


Figure 11

CHAPTER 9 – TROUBLESHOOTING AND REPAIR

The following table provides troubleshooting and repair instructions for problems that may be encountered when operating **AFISCOOTER C**, as well as the best way to correct the problem. The table contains three columns:

Symptom	Probable Cause	Remedy
The problem you are	The most likely causes, in order of	Recommended action to
experiencing	probability (most likely first)	correct each probable cause

Remember: you can contact your dealer at any time for further professional support.

Remark:

For troubleshooting repairs, the only tools needed are regular and Philips screwdrivers to open the rear lights covers, to replace the bulbs if burnt.



❖ Replacement parts:

• Tires and tubes are: 4.10/3.50–6" (all models)

• Headlight bulb: 24V/25W

· Rear light bulb: contact your authorized dealer

No.	Symptom	Probable Causes	Remedy
1	Flat tire and unstable driving.	✓ Low air pressure ✓ Puncture	✓ Pump tire to normal pressure✓ Repair tire
2	The LEDs flash and the vehicle does not move.	✓ (identified by the fault code)	✓ Call for technical support
3	Handbrake is fully engaged but the vehicle does not stop.	✓ Loose handbrake mechanism	✓ Tighten the brake cable
4	When throttle control lever is released on a level surface, AFISCOOTER C takes longer than 3 meters to stop.	✓ Controller is faulty or out of adjustment	✓ Call for technical support
5	Key switch is turned ON but the ON light does not come on.	✓ Main fuse (2.1a in Fig. 1) popped✓ Electrical fault	✓ Reset fuse Note: Do not reset fuse more than twice. If the symptom still recurs, call your authorized dealer for support.
6	AFISCOOTER C does not move when you squeeze the throttle control lever.	 ✓ Key switch is OFF ✓ Charger is connected to charging socket ✓ Handbrake is on ✓ Control system failure 	 ✓ Turn key switch ON ✓ Disconnect charger ✓ Take off handbrake ✓ Call for technical support
7	Intermittent drive.	✓ Battery capacity is low✓ Faulty connections✓ Faulty battery	 ✓ Charge batteries for at least 18 hours ✓ Remove battery cover and check battery connection. If terminals are corroded, clean them with a damp, clean cloth ✓ If red LEDs are still on, contact your dealer for a replacement battery
8	Right or left indicator light is inoperative.	✓ Faulty LED light board	✓ Replace LED board
9	Headlight or rear light does not light.	✓ Burnt out bulb	✓ Replace bulb
10	When driving uphill or carrying heavy loads, speed reduces gradually (but scooter still moves).	 ✓ Controller became overheated 	✓ Stop driving and let controller cool

CHAPTER 10 – EMI WARNING



All types of electrically powered vehicles, such as powered wheelchairs and motorized scooters (in this text all types will be referred to as "powered vehicles") may be susceptible to electromagnetic interference (EMI). This is from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones. The interference (from radio wave sources) can cause

the powered vehicle to release its brakes, move by itself, or move in unintended direction. It can also damage the powered vehicle's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered vehicle can resist EMI interfering electromagnetic energy (EM) emitted up to a 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 an immunity level that would provide useful protection from the more common sources of radiated EMI. This vehicle as shipped, with no further modification, has an immunity level of 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 warning listed below, your risk of 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: citizen band (CB) radios, "walkie talkies", security, fire and police transceivers, cellular telephones and other personal communication devices.

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

NOTE: Other types of hand held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players and small appliances such as electric shavers and hair dryers, as far as we know, are not likely to cause EMI problems to your powered vehicle.

Powered Vehicle Electromagnetic Interference (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna, the EM field from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy close to the powered vehicle's control system while using these devices. This can affect powered vehicle movement and braking.

Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered vehicle.

WARNINGS

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect powered vehicles.

Following the warnings listed below should reduce the chance of unintended brake release or powered vehicle movement which could result in serious injury:

- 1) Do not operate hand-held transceivers (transmitters-receivers) such as citizen band (CB) radios, or turn ON personal communication devices such as cellular phones, while the powered vehicle is ON;
- 2) Be aware of nearby transmitters, such as radio or TV stations and try to avoid coming close to them.
- 3) On appearance of unintended movements or brake release occurrences, switch the powered vehicle OFF **as soon as it is safe to do so**.
- 4) Be aware that adding accessories or components, or modifying the powered vehicle, may make it more susceptible to EMI (since there is no easy way to evaluate their effect on the overall immunity level of the powered vehicle).
- 5) Please report to us all incidents of unintended movement or brake release and 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) This product delivered to you has an immunity level of 20 V/m.

Appendix A - Specification Sheet

Type: AFISCOOTER C3/C4 Manufacturer: Kibbutz Afikim 15148, Israel

Maximum occupant mass: 150 kg (for the tests, a 100kg (220 lbs) dummy according ISO 7176-11 was used, supplemented by 50kg(110lbs) weights distributed approximately proportional to the dummy's weight distrib.)

(Metric table)

Disclosure information (ISO 7176-15)									
	Standard reference	min.	max.	Standard reference	min.	max.			
	Overall length with-4w leg	1320mm		Seat plane angle		°3			
r	rest - 3w	1300mm							
	Overall width	665 mm		Effective seat depth	450 mm				
F	Folded length			Effective seat width	460 mm				
F	Folded height	700mm		Seat surface height at front edge	660 mm				
	Total mass - 4w	122 kg		Backrest angle					
	-3w	102kg							
ľ	Mass of the heaviest part			Backrest height	520 mm				
	Static stability downhill			Foot rest to seat distance	255 mm				
	Static stability uphill	13°		Leg to seat surface angle	93°				
	Static stability sideways	10°	14°	Armrest to seat distance	160 mm				
E	Energy consumption			Front location of armrest structure	280 mm				
[Dynamic stability uphill			Handlebar diameter	65mm				
	Obstacle climbing	25 mm	100mm	Horizontal location of axle					
1	Maximum speed forward		15km/h	Minimum turning radius					
			12km/h	4W –	340 cm				
			10km/h	3W	255 cm				
	Minimum braking	2500 mm		Minimum turn-around radius					
	distance from max speed	(on the flat)							
F	Pneumatic Tires –	4.10/3.50-6"		Charger for charging dry/gel acid	24VDC max	kimum			
	All tires			battery	charge 5 Ar	np.			
F	Pressure of front tires:		25 psi						
-	Pressure of rear tires:		25 psi						
	Capacity, Battery type	Sealed Lead Acid /Gel/AGM, 2x12V 40-50Ah max.							
	Battery Dimensions	Dims. L=197mm x W=168mm x H=175mm							
	Charger	Charge current 5 Amp. maximum							
	Options	Left-hand drive	tiller,						

(Inches table)

(mones table)											
	formation (ISO	7176-15)									
Standard reference	min.	max.	Standard reference	min.	max.						
Overall length with - 4w	51.9"		Seat plane angle		°3						
leg rest - 3w	51.2"		-								
Overall width	26.2"		Effective seat depth	17.7"							
Folded length			Effective seat width	18.1"							
Folded height	27.5"		Seat surface height at front edge	26"							
Total mass - 4w	268 lb		Backrest angle								
- 3w	224 lb										
Mass of the heaviest part			Backrest height	20.5"							
Static stability downhill			Foot rest to seat distance	10"							
Static stability uphill	13°		Leg to seat surface angle	93°							
Static stability sideways	10°	14°	Armrest to seat distance	6.3"							
Energy consumption			Front location of armrest structure	11"							
Dynamic stability uphill			Handlebar diameter	2.5"							
Obstacle climbing	1"	39.4"	Horizontal location of axle								
Maximum speed forward		10 mph	Minimum turning radius								
		8 mph	4W –	134"							
		6.7mph	3W	100.4"							
Minimum braking	98.4"		Minimum turn-around radius								
distance from max speed											
Pneumatic Tires –	4.10/3.50-6"		Charger for charging dry/gel acid	24VDC max	kimum						
All tires			battery	charge 5 Amp.							
Pressure of front tires:		25 psi									
Pressure of rear tires:		25 psi									
Battery type ,Capacity		Sealed Lead Acid /Gel/AGM, 2x12V 40-50Ah max.									
Battery Dimensions	Dims. L=7.7" x										
Charger	Charge current 5 Amp. maximum										
Options	Left-hand drive	tiller,	Rear basket								

Remarks

^{*} All technical specifications are subject to change without prior notice.

^{**} The maximum speed in every country is limited according local traffic regulations.