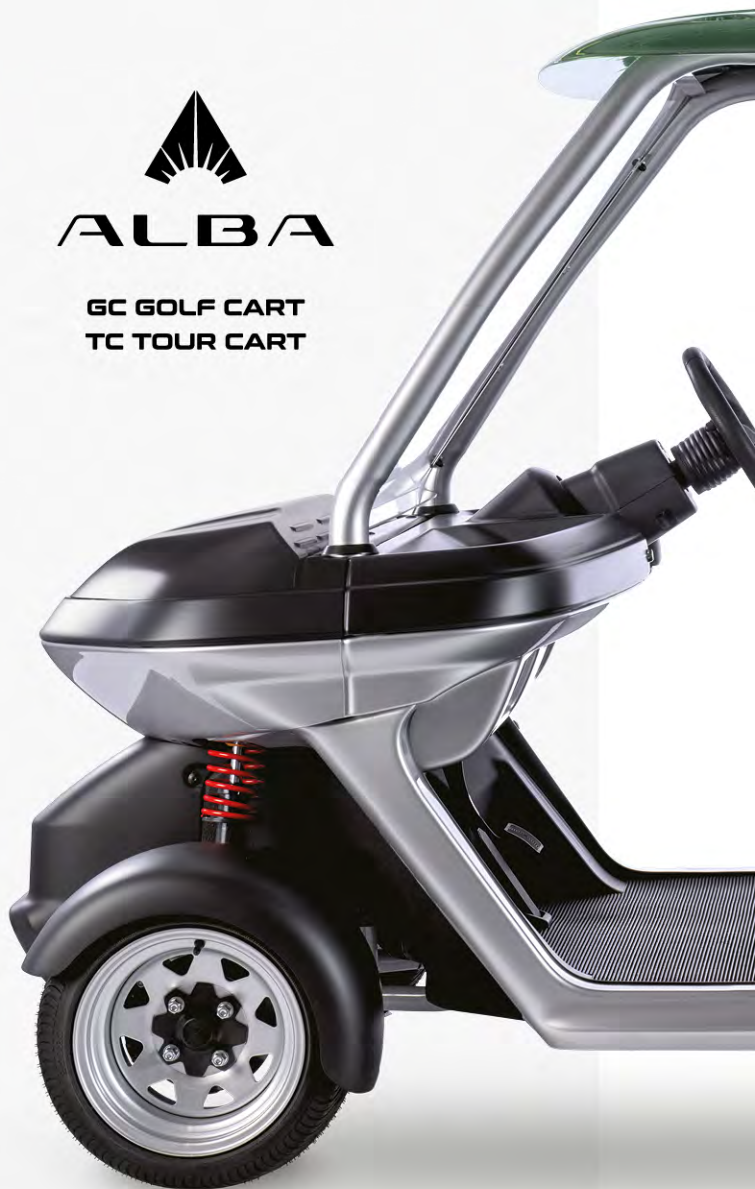


ENGLISH



GC GOLF CART
TC TOUR CART



USE AND MAINTENANCE INSTRUCTION MANUAL

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Congratulations on your new Alba vehicle!

Alba is the right combination of performance, versatility and elegance, to make your days of relaxation special.

We invite you to read this manual before use. You will find all the information on your new vehicle and important safety recommendations. If further requests are required on operation or maintenance, contact the authorisation *Alba* dealer for support.

Welcome to *Alba* Crew!



After sales and support department
Strada Tagliata, 18 - 12051 Alba (CN) - Italy
service@albamobility.it

1. FOREWORD

1.1. SCOPE OF THE USE AND MAINTENANCE INSTRUCTION MANUAL

This manual is an integral part of the vehicle and has the purpose of providing all the information necessary for:

- sensitising users to safety issues;
- knowing how the *Alba* vehicle works;
- correct use of the *Alba* vehicle.



IMPORTANT! Users are obliged to carefully read the content of this instruction manual.

The time this takes will be greatly compensated by correct operation of the vehicle and by use in safe conditions.

1.2 PRESERVATION OF THE INSTRUCTION MANUAL

The manual should be carefully kept and must accompany the vehicle in all passages of ownership that may occur during use of the vehicle.

Preservation must be encouraged by handling with care, with clean hands and not placing it on dirty surfaces. Parts must not be removed, torn or arbitrarily changed.

The manual should be kept in an environment protected against humidity and heat inside the vehicle.

2. INFORMATION GENERAL

2.1 MANUFACTURER'S IDENTIFICATION DATA

MANUFACTURER

Albamobility Srl

ADMINISTRATIVE AND REGISTERED

HEADQUARTERS:

Strada Tagliata, 18 - 12051 Alba (CN) - Italy

AFTER SALES/SPARE PARTS SERVICE

T +39 0172 48 81 91

CONTACTS

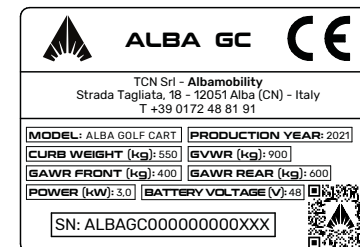
info@albamobility.it

www.albamobility.it

2.2 IDENTIFICATION DATA AND PLATES OF THE VEHICLE

Each vehicle is identified with a CE plate on which its reference data is indelibly outlined. It includes the

serial number of the vehicle (SN).



For any communication with the manufacturer or the support centres, always state these references. The CE plate is positioned on the rear battery compartment of the seat.

2.3 EC DECLARATION OF CONFORMITY IIA DIR. (2006/42/EC)

IL FABBRICANTE

Albamobility Srl

Azienda

Strada Tagliata 18

Indirizzo

Alba

Città

12051

Cap

CN

Provincia

ITALIA

Stato

DICHIARA CHE LA MACCHINA

STREET CART

Descrizione

Modello

ALBA SC

Serie/matricola

2020

Anno costr.

VEICOLO PER TRASPORTO PERSONE

Uso previsto

È CONFORME AL REGOLAMENTO

REGOLAMENTO (UE) N. 168/2013 DEL PARLAMENTO EUROPEO E DEL CONSIGLIO del 15 gennaio 2013 relativo all'omologazione e alla vigilanza del mercato dei veicoli a motore a due o tre ruote e dei quadricicli (Testo rilevante ai fini del SEE) (GU L 60 del 2.3.2013, pag. 52)

Luogo e data del documento

Il fabbricante

Albamobility Srl
Strada Tagliata 18
12051 Alba (CN)

2.4 INFORMATION ON TECHNICAL SUPPORT

You are advised to always contact the manufacturer's official support service.

The vehicle is covered by warranty, as stated in the general sales terms. If, during the period of validity, malfunctions or faults are found on parts of the vehicle, which are covered by warranty, the manufacturer will repair or replace the faulty parts, having carried out appropriate checks on the vehicle.

Changes made by the user, without the explicit written authorisation of the manufacturer, causes the warranty to expire and relieves the manufacturer of any liability for damages caused by the faulty product.

This particularly applies when the aforementioned changes are carried out on safety devices, reducing their efficiency. The same considerations apply when using non-original spare parts or parts different to those explicitly indicated by the manufacturer as "SAFETY DEVICES".

3. SAFETY

3.1 GENERAL SAFETY WARNINGS



ATTENTION! This symbol indicates important information on your safety. Read it carefully!

Before making the vehicle operative, read the instructions carefully contained in this manual and accurately follow the instructions reported in it.

The manufacturer has made the effort to design this vehicle to make it as **INTRINSICALLY SAFE** as possible.

The vehicle is equipped with all the guards and safety devices deemed necessary; it is also supplied with sufficient information for its safe and correct use.

This manual contains specified further recommendations, under the user's responsibility, to prevent human errors and forbidden actions relating to reasonably foreseeable misuse. It is however indispensable to diligently follow the instructions below:

it is strictly forbidden to inhibit the safety devices installed on the vehicle;

- it is strictly forbidden to change parts of the vehicle. In the event of malfunctions, due to non-compliance with the above, the manufacturer cannot be held responsible for the consequences. You are advised to request any changes directly to the manufacturer.

- clean the covers of the vehicle, the panels and controls with soft, dry cloths or cloths slightly soaked in detergent; do not use any type of solvent, such as alcohol or petrol, since the surfaces could get damaged;



IMPORTANT! The manufacturer is deemed relieved of any liability for damage caused by the vehicle to people, animals or property in the event of:

- use of the vehicle by staff who are not able to drive;
- misuse of the vehicle;
- electrical power supply defects;
- lack of planned maintenance;
- unauthorised changes or interventions;
- use of non-original spare parts or parts not specifically for the model;
- total or partial non-compliance with the instructions;
- use contrary to specific national standards;
- natural disasters and exceptional events.

3.2 GENERAL PROVISIONS

All the safety provisions on the mobile parts to avoid accidents and ensure safety cannot be modified, nor removed, but must be adequately safeguarded.

3.3 INSPECTIONS AND CHECKS

The checks must be carried out as indicated in the Maintenance chapter (*page 34*) of this manual.

If the worn or faulty parts are not promptly replaced, the manufacturer cannot be held in any way liable for damage caused by any deriving accidents. Tests must be carried out by an expert person; they must be visual and functional, with the purpose of guaranteeing vehicle safety.

They include:

- checking all the support structures, which must not have any breakages, damage, deformities, corrosion, wear or alterations compared to the original characteristics;
- checking all the mechanical units;
- checking all the safety devices installed on the vehicle.
- checking all the connections with pins and screws;
- functionality testing of the vehicle;
- vehicle status check.

The results of this verification should be outlined on a specific record.



IMPORTANT! If anomalies are found, they must be eliminated before putting the vehicle back in service, and the expert who carries out the test should note the repair carried out on the record, thereby giving approval to use the vehicle.

If dangerous breakages or faults are found, they should be immediately communicated to the support service.

Place the vehicle out of service if operating faults occur and immediately contact the support service.

Ensure that there are no objects among the vehicle parts.

Check that after any maintenance intervention, no object remains between the units in motion.

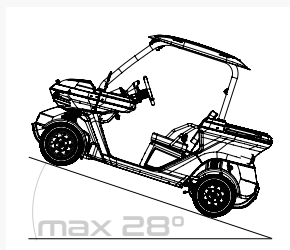
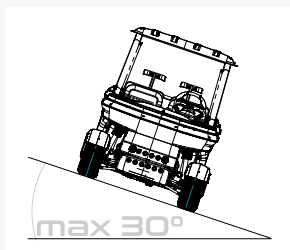


ATTENTION! To guarantee utmost safety of vehicle motion, it is however **FORBIDDEN** to:

- tamper with the vehicle;
- leave the mobile parts unguarded;
- use the vehicle when operational, but not fully efficient;
- alter the vehicle to change the original, established use, without the manufacturer's explicit authorisation or without assuming the complete responsibility as outlined by Machinery Directive 2006/42/EC;
- move the mobile parts with manual operations in the event of a power cut.

3.4 PLANNED USE

The vehicle is intended to transport people (max. 2) and a max. load of 50 kg in private areas and not open to road circulation. The vehicle cannot in any case be used on urban and suburban roads or motorways and where roadworthy certification is required. The vehicle allows you to reach a maximum speed of 30 km/h and can overcome a maximum slope of 30%.



Any other use of the vehicle is not authorised and automatically entails both the forfeiture of the warranty and relieves the manufacturer from any liability for any damage to property or people.



IMPORTANT! Use of different products/materials to those specified by the manufacturer, which can damage the vehicle and hazardous situations for the operator and/or for the user, is considered incorrect use or misuse.

3.5 COUNTERINDICATIONS FOR USE



ATTENTION! The vehicle cannot be used by people who have not followed an adequate training course on use of the vehicle, by people under 16 years of age and by people unable to drive or under the influence of alcohol or drugs.



ATTENTION! The vehicle must not be used on broken/unstable/flooded/snowy ground which could lead to overturning and loss of stability with risks for the safety of those on board.

The vehicle does not allow towing of any trailer.

Transport of people or animals is however not planned on the rear of the vehicle, which is only suitable for transporting objects.

3.6 SAFETY DURING USE

Some indications follow (the list is approximate and non-exhaustive) for safe use of the vehicle:

- the vehicle allows the simultaneous transport of two people, the driver and passenger, who must remain seated inside the vehicle, holding firmly onto the steering wheel or specific handles; it is prohibited to carry people on the rear of the vehicle;
- start the vehicle only having ensured the passenger is fully seated;
- before exiting the vehicle, ensure the electromagnetic brake is engaged and that the vehicle is locked;
- pay attention to the area in the vicinity of the vehicle, in particular the driver must concentrate to be able to react effectively in the event of an unexpected event;
- avoid sudden accelerations and decelerations, as they could cause loss of balance of the transported person;
- evaluate in advance the condition of the terrain covered by the vehicle in order to adapt the driving characteristics to the conditions of the ground.

Misuse and/or poor maintenance of the vehicle may cause serious damage or injury to occupants or people nearby.

The above indications cannot be considered as the only ones necessary for safe driving; the different modes of use of the vehicle, although not admitted but in any case assumed by the manufacturer during the risk assessment, require special

attention, caution and use according to the rules of common sense.

A careless, fast and irresponsible drive could result in serious damage to property and people.

Avoid steep paths and slopes as much as possible. Descents must be approached with caution, modulating the braking according to the conditions of the ground. Do not face the slopes sideways: this condition could cause the vehicle to overturn or fall!

Driving the vehicle on wet terrain requires more attention and caution, as wet surfaces reduce stability of the vehicle and increase braking space.

3.7 SIGNS

There are some adhesive plates on the vehicle, which remind the user of some forbidden actions or good practices for use of the vehicle.

Under the wheel



WARNING

- For your safety, please read carefully the supplied Manual before starting vehicle.
- Keep your seat while moving and hold on to handlebars. If vehicle is equipped with seat belts, always keep your seat belt fastened when sitting.
- When driving uphill or downhill gradients, drive straight up or down the gradient rather than diagonally.
- Control from driver's side by authorized person only and only in specified areas.
- When vehicle is moving, always keep your whole body inside vehicle.
- Do not start the vehicle until all passengers are fully seated.
- Drive slowly on bends and uphill or downhill gradients.
- Do not use under the influence of alcohol or drugs.
- This vehicle can only transport 2 people.
- Turn the key OFF if not using and remove it.
- When driving downhill, reduce speed by braking.
- Do not leave unattended children into or near the vehicle.
- Make sure the parking brake is activated before leaving the vehicle.
- Windshield does not protect you against flying objects, including but not limited to golf balls.
- Check national and local laws for authorized driving minimum requirements and always comply with.
- Front and Rear tires have to be inflated to 2 bar/29PS.

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Golf bags compartment

WARNING

Do not sit or stand in the rear bag bay. Sitting or standing here in this area may cause falls with **SERIOUS INJURY** or **DEATH**.

TAS0007351-1



Behind the seats

DANGER

Faulty batteries, wires or plugs should be immediately replaced by qualified personnel only. Touching battery cables or uninsulated battery terminals may cause electric shock resulting in **SERIOUS INJURY** or **DEATH**. Never connect battery positive and negative terminals. Such behaviour may result in power shortage, which may cause burns or other **SERIOUS INJURY** or **DEATH**.

WARNING

- Always pay attention to turn the Main Power switch OFF before removing or reconnecting batteries, battery cables or any other electrical component. Failure to respect this warning may result in electric arc or battery explosion.
- Any modification or tampering on vehicle may result in **SERIOUS INJURY** or **DEATH**, as well as lasting damage to it.
- Any unauthorized modification to the vehicle will void warranty.
- When releasing parking brake, take all necessary safety precautions.
- Vehicle can roll unexpectedly anytime if parking brake is released, even on a level ground, causing **SERIOUS INJURY** or **DEATH**.
- To release the parking brake refer to the user manual and read carefully the instructions.
- Surface may be hot. Contact may cause burns or other serious injury, **DO NOT TOUCH!**

CAUTION

DON'T REMOVE COVER. Service operations should be carried out by qualified personnel only. Always turn the Main Power switch OFF before removing or reconnecting batteries, battery cables or any other electrical component. Failure to respect this warning may result in electric arc or battery explosion.

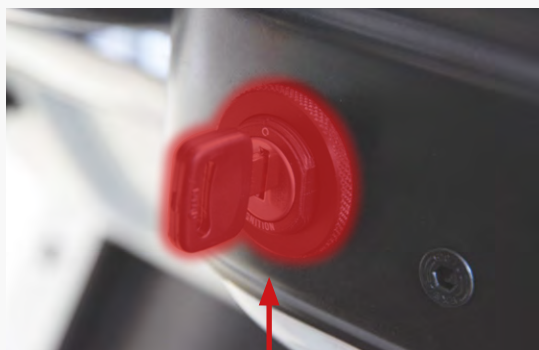
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3.8 EMERGENCY BRAKING

If, when the vehicle is in motion, the ignition key is switched 'OFF' (position of the key removed), the electromagnetic brake slows down the vehicle until it stops.

There is a possibility that the electromagnetic brake will be damaged and that both the wheels and the transmission will be damaged; it is therefore advisable to have a thorough check carried out by an authorised ALBA technician.

This type of emergency braking is to be considered risky and should only be used in case of an emergency due to the malfunction of the hydraulic brakes.



ATTENTION! Avoid switching off the key (position indicated in the figure) when the vehicle is in motion, if not in the event of an emergency.

4. FIRST USE

4.1 TRANSPORT MOVEMENT AND STORAGE

The vehicle can be moved in the event of flat batteries, after manually unlocking the electromagnetic brake, using the towing hook placed in front of the vehicle. Be careful not to damage parts of the vehicle. Check that the strap/cable used for movement, when tensioned is not in contact with parts of the bodywork.



ATTENTION! Release of the electromagnetic brake (paragraph 7.7 on page 43) involves the risk of the vehicle moving. Ensure you carry out this operation only in safe conditions, on flat and stable ground. If unused, park the vehicle, if possible, protected against atmospheric agents and, in the event of a prolonged stoppage, keep the battery charger connected.

4.2 PREPARATION FOR RECHARGE

Preparation of the electrical system

Vehicle charging is performed using a normal wall socket with 220V power supply.

The outlet must be located in a safe place, protected from the elements and in an area not at risk of explosion.

The manufacturer cannot be held responsible for damage to people, animals and/or property, caused by non-compliance with this provision.



ATTENTION! These provisions are always the complete responsibility of the user and nothing can be attributable to the manufacturer for damage to property, people and/or animals due to an inadequate electrical connection (maximum battery charger absorption: INPUT 100-240VAC 50/60Hz 12/6A 1400W).

4.3 PRELIMINARY CHECKS

Before starting the vehicle, you must check it overall as indicated below.

Batteries

Having lifted the seat and having accessed the battery compartment, carry out these checks:

- check there is no corrosion/rust on the battery poles;
- check there are no leaking liquids from the batteries;
- check correct fastening of the battery pack;
- check correct connection of the cables.

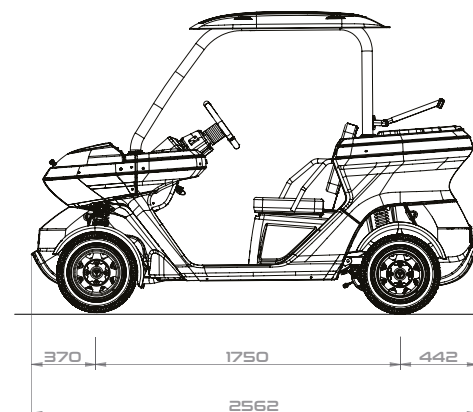
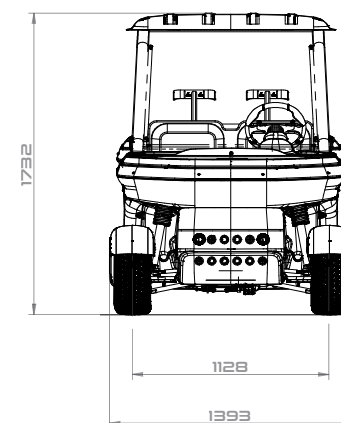
Drive controls

- check steering has no irregular clearances;
- check correct operation of the braking system.

If irregular behaviour is found during checks, contact technical support and do not use the vehicle.

5. DESCRIPTION: UNIT

5.1 DIMENSIONS



5.2 ENVIRONMENTAL CONDITIONS

The vehicle does not require particular environmental conditions.

Temperatures permitted from -5° to 40° C, with humidity not exceeding 50% at 40° C and not exceeding 90% at 20° C.

The vehicle is suitable for working in environments at:

- temperature between + 5° and + 40°C with an average temperature around 35°C;
- relative humidity between 30% and 95%.

It is forbidden to use in environments which are:

- in a corrosive atmosphere;
- at risk of fire;
- in an explosive atmosphere.

5.3 TECHNICAL DATA

The main technical data are outlined below:

Power	kW	3
Vehicle weight	kg	550
Max load weight	kg	350
Power supply voltage	V	48
Maximum speed	Km/h	30
Maximum surpassable gradient with charged battery	%	30

5.4 STANDARD PROVISION

The vehicle's standard equipment includes:

- cable for battery charger 220V;
- electromagnetic brake release kit;
- Use and Maintenance Instruction Manual

6. USE

6.1 BATTERY PACK, RECHARGE AND SAFETY INFORMATION

To avoid premature wear of the batteries, the vehicle must always be charged when not in use, keeping it connected to the domestic electricity mains via a charging cable. The charger will apply appropriate algorithms to maintain the state of charge without damaging them.



ATTENTION! Before use or maintenance of the batteries, read the instructions carefully which will be described below. Failure to comply with instructions or normal rules of safety and common sense can cause serious material damage to property and even serious injury to people. Avoid leaving the vehicle and batteries exposed to freezing temperatures. Never recharge a battery that is exposed to temperatures below 0 °C for a long time.

Health



Declaration of hazards:

- causes severe skin burns;
- causes serious damage to sight;
- can damage fertility or the baby in the womb if swallowed or inhaled;
- can cause cancer if swallowed or inhaled;
- causes damage to the central nervous system, blood and kidneys after prolonged or repeated exposure;
- may form explosive gas/air mixtures during charging;
- extremely flammable gas (hydrogen);
- danger of explosion, fire, rupture or protrusion;

Environmental



Physical

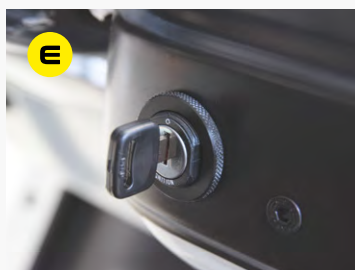
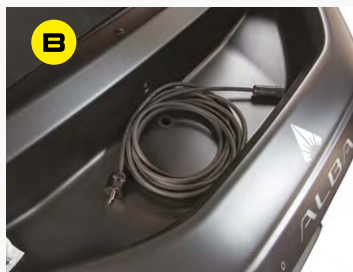


Preventive declarations:

- wash carefully after handling;
- do not eat, drink or smoke when using this product;
- wear gloves and protective clothing, guards for the eyes/face;
- avoid breathing in dust/smoke/gas/vapours/spray;
- only use outside or in a well ventilated area;
- causes irritation to skin, serious damage to sight;
- contact with internal components can cause irritation and/or serious burns. Avoid contact with the internal acid;
- irritant for eyes, skin and respiratory tract.

Precautions for use:

- check that all battery connections and cables are firmly connected to the terminal; too loose or too tight connections can cause breakage, melting or fire;
- do not place objects on batteries or terminals to avoid short circuits;
- electrolyte is an acid and water solution, therefore avoid contact with the skin;
- if the acid comes into contact with the skin or eyes, rinse immediately with water and consult a doctor;
- charge the batteries in a well ventilated area, since the batteries produce gas fumes when charging. Lift the cushion of the seat in the vertical position during recharge.
- never add acid to the battery;
- the battery electrolyte is poisonous and dangerous: causes serious burns or other damage;
- contains sulphuric acid. Avoid contact with skin, eyes or clothes;
- do not carry, store, handle or use batteries if not in a vertical position;
- wear a full face visor and rubber gloves when working on or near batteries;
- batteries produce explosive gases. Keep batteries away from sparks, cigarette flames or open flames;
- always ensure adequate ventilation during charging or use in enclosed spaces;
- KEEP OUT OF REACH OF CHILDREN.



The battery pack is placed under the seat, to access lift the top part of the seat until the locking position is reached (photo A). The batteries are recharged through the special cable supplied (photo B).

Connect the cable via the appropriate connector to the charging socket of the vehicle located on the left under the steering wheel and then the electrical power cable (photo C). The flashing green LED next to the connector indicates that charging has started (photo C).

At the end of the charge the led remains lit with a fixed green light. For further verification of the state of charge of the batteries turn the key to the position ON (photo E-F); in this way you can view the percentage of charge on the indicator located above the steering wheel (photo D).

During vehicle charging for safety reasons, the accelerator pedal is inhibited and the electromagnetic brake remains in the locked position; handling is not possible even when the ignition key is activated



ATTENTION! Recharging operations must always be carried out in safe conditions and in an adequate premises in terms of dimensions and ventilation. If any breakage of the connector or abrasion of the electrical cable is found, do not charge the vehicle and contact support. When charging, do not overlap the electrical cable with any means or materials that could cause abrasion or cutting.

6.2 EXTERNAL OVERVIEW



- | | |
|-----------------------|------------------------------|
| 1 led front lights | 5 battery charger |
| 2 towing hook | 6 item compartment with lock |
| 3 front wheels | 7 brake oil tank |
| 4 battery compartment | |



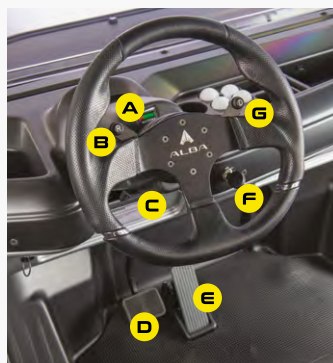
- | | |
|---------------------|-------------------------|
| 8 ball holder | 12 item pocket |
| 9 US charger socket | 13 charging compartment |
| 10 charging socket | 14 rear lights |
| 11 inverter | 15 rear wheels |

Rear loading compartment. The rear loading compartment has a maximum capacity of 50 kg and allows transport of two golf bags or, alternatively, other objects, without exceeding the maximum load value.

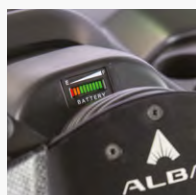


ATTENTION! It is strictly forbidden to transport people or animals in the rear loading compartment.

6.3 DRIVING SEAT OVERVIEW



- A** charge indicator
- B** "R" reverse command
- C** adjustment lever steering wheel height
- D** brake pedal
- E** accelerator pedal
- F** ignition key
- G** "D" drive command



Charge indicator Displays the charge status of the battery via 10 colour sections:

- **RED** (1 section). Indicates the batteries are completely flat: the remaining autonomy is null, it is recommended you recharge the batteries as soon as possible to avoid causing their deterioration. In these conditions, it is

not possible to face steep slopes because you have a limited power from the controller to preserve the health of the batteries.

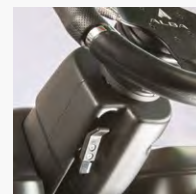
- **YELLOW** (2 sections). Indicates the batteries are almost completely flat, reserve condition. It is possible that the

controller will start to limit vehicle power to preserve the health of the batteries. It is recommended you return immediately to the charging point.

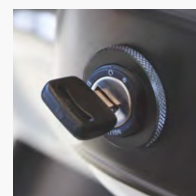
- **GREEN** (7 sections). Indicates the remaining charge of the battery is 20% to 100% and guarantees a maximum autonomy up to approx. 60km.



ATTENTION! The autonomy varies based on the ground, the conditions, the driving style and the status of the batteries; the values are therefore considered for indication purposes only.



Steering wheel height adjustment lever. Placed under the steering column, when activated, it allows you to adjust the height and length of the steering wheel according to the driver preferences. At the end of adjustment, return the lever to the locking position of the column.



Ignition key. The ignition key can be moved to the following three positions.

OFF. It is the only position that allows you to insert or remove the key of the vehicle. The same remains off with the electromagnetic brake locked: the only utility powered by batteries is the USB charging socket on the

driver side, which can be activated with the appropriate button.

ON. The vehicle is on and, by pressing the "D" (drive) or "R"

(reverse) buttons and pressing the accelerator pedal, it starts moving. The battery charge indicator also switches on.

⌂D. The key in this position switches on the front and rear lights of the vehicle; this position maintains the "ON" status.



Drive command ("D"). When the button identified with the letter "D" is activated, the vehicle moves forward, using the accelerator pedal.

Reverse command ("R"). When the button identified with the letter "R" is activated, the vehicle

reverses, using the accelerator pedal. An intermittent acoustic warning signal is activated when reversing.



ATTENTION! The user must pay particular attention when driving in reverse. The acoustic warning signal does not relieve the driver from driving cautiously and responsibly.

Brake pedal. There is redundancy on the brake pedal. In case of an emergency, by pressing the brake pedal traction is disabled.



Accelerator pedal. When activated, the vehicle moves in the direction set with the steering wheel commands. If released, the vehicle will stop at the time set by the controller. The electromagnetic brake is activated three seconds after the stop. If

released uphill, under the same conditions, the "HILL HOLDER" function is activated.

USB charger socket. The USB charger socket on the passenger side is activated using the built-in button.



ATTENTION! To preserve the battery charge in this condition, you are advised to switch off the USB

socket as soon as possible.

7. MAINTENANCE

7.1 LIQUID LEVELS CHECK

In order to keep the vehicle efficient, it is advisable over time to check the level of water in the batteries and the level of brake oil.

Water level control in the batteries should be carried out approximately once a month (carry out with the batteries fully charged).



ATTENTION! Store baking soda and large amounts of water nearby; this will help neutralize any acid leakage from battery openings and prevent corrosive damage to batteries and the vehicle. Avoid acid contact with skin;

Open the battery compartment by lifting the seat and locking with the snap lever. Unscrew the caps and check the water totally submerges the internal metal elements.

If liquid top-up is necessary, use an adequate container and top up with deionized or distilled water.



ATTENTION! Do not top up the batteries before recharge; this increases the risk of acid leaking during the charging phase, since the liquid would boil.

Having fully charged the batteries, if not already present, add the demineralized water to complete coverage of the metal plates of the battery. When complete, carefully close the caps to prevent liquid spillage.

The oil level should be checked approximately once a year or on sounding of the alarm signal. The vehicle is equipped with a low-level brake oil sensor. If the level is lower than necessary, the driver is alerted by a continuous acoustic warning sound. To access the brake fluid tank, open the front object holder and unscrew the locking screws of the bodywork. The oil level must reach the notch (MAX) indicated on the tank.



7.2 BATTERIES REPLACEMENT



ATTENTION! Some good practice is listed below to use in the event you have to handle a lead battery (for explanatory purposes, non-exhaustive).

- the batteries must be handled by adequately trained staff or those with previous experience in this field;
- batteries are corrosive and failure to comply with the above may cause personal injury or death as lead acid can cause severe burns and destroy clothing;
- it is advisable to remove all jewellery, as they represent a risk: metals in contact with the poles of the batteries can cause electric arcs with consequent serious personal injuries;
- always wear glasses, gloves and protective clothing when handling acid lead batteries;
- keep batteries away from sparks, cigarette flames or open flames;
- always ensure adequate ventilation during operations in closed spaces;
- open the battery compartment by lifting the seat and locking with the snap lever;
- disconnect the battery pack by first removing the negative pole clamps and then the positive pole clamps that connect it to the vehicle before starting replacement;
- unscrew the locking nuts on the brackets both inside the battery compartment and under the vehicle floor;
- take out the brackets taking care not to simultaneously touch the battery poles;
- pull out the centrally placed H-bracket by unscrewing the M10 self-locking nuts under the vehicle;
- disconnect the battery terminals that need to be replaced;
- lift the batteries to be replaced and place the new ones;

- connect the terminals to the new batteries following the diagram as shown below with a tightening torque of $10\text{Nm} \pm 0.5\text{Nm}$.



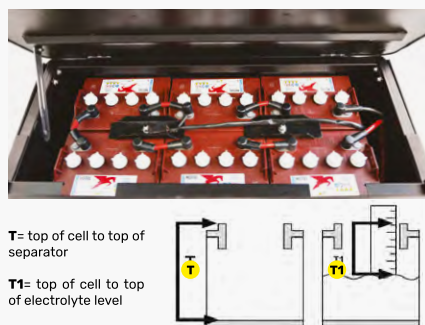
- Do the opposite of what was described above when replacing the brackets. The nuts under the M10 must be tightened to $25\text{Nm} \pm 2\text{Nm}$. The nuts above the batteries, on the other hand, at $9\text{Nm} \pm 0.5\text{ Nm}$;
- first connect the positive and then the negative pole to the terminals of the vehicle with a torque of $10\text{Nm} \pm 0.5\text{Nm}$;
- close the battery compartment by releasing the support bracket.

7.3 ELECTROLYTE LEVEL CONTROL IN LEAD BATTERIES

7.3.1 BATTERY MANUAL FILLING

For proper use and to avoid premature wear of lead batteries it is necessary to check the level of electrolyte (liquid inside each individual element of the battery). This operation should be carried out monthly.

If you do not have the automatic filling system of the batteries, you must unscrew the white bayonet cap of each cell of the battery to verify the level.



The operation must be carried out with the vehicle fully charged, i.e. with a green charger light fixed or the charge indicator placed above the steering wheel with all the LEDs on.

Measurement T1, at which the level of electrolyte with charged batteries must be ascertained, is 40mm. If lower, you must add demineralized water (deionized or distilled).

If the level of electrolyte has fallen below value T, i.e. not visible, demineralized water must be added up to a height of T=51mm. Then fill up to T1=40mm with the batteries charged.

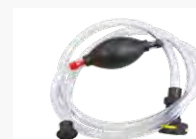
7.3.2 AUTOMATIC BATTERY FILLING VIA HYDROLINK SYSTEM



If the vehicle is fitted with the automatic filling system, as shown below, simply connect the charging tube and add demineralized water.

The procedure below must be followed:

- remove the protective cap from the charging connector;
- immerse the filling pump tube (side without connector) in a container with demineralized water.



Press and release the pump so that the water is added in the tube and all the air is removed. Pay attention to water leaking out of the tube, you are therefore advised to direct it towards the container.

- insert the counterpart in the battery side charging connector

by pressing and releasing the pump you begin to introduce demineralized water into the batteries. Continue pumping until the consistency changes and you can no longer, as a result, introduce demineralized water into the charging system.

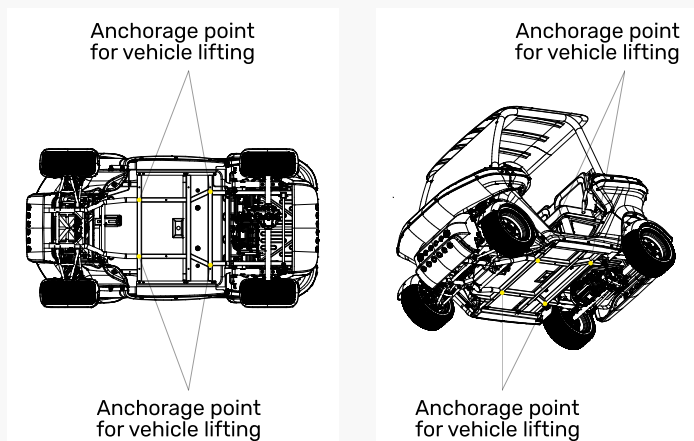


- disconnect the charging tube and reinsert the connector cap on the battery side.

Be careful when exposing the vehicle to temperatures below 0 °C. The water-containing charging system may freeze and damage. Therefore, if the vehicle is exposed to these temperatures, it is necessary to remove the demineralized water inside the system by purging the tubes.

7.4 ANCHORAGE POINTS FOR LIFTING

For wheel change or other work on the undercarriage of the vehicle, the vehicle must be lifted on one of the anchorage points provided by the manufacturer.



- only use the anchorage points to avoid damage to the vehicle;
- never work under a vehicle supported only by a jack;
- lift the vehicle only on a solid, stable and flat surface;
- use racks and check that the vehicle is stable and safe before taking action;
- place wedges on the raised wheels to prevent the vehicle from rolling;
- work with extreme caution, as lifting causes high instability of the vehicle.

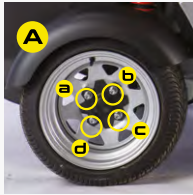
To reduce the possibility of serious injury or death due to a vehicle falling from a jack or stand, ensure you take the following precautions:

- place the vehicle on a solid, stable and flat surface;
- do not perform any operation without ensuring the vehicle is correctly positioned on the stands;
- the wedges are in front and behind wheels that are not lifted;
- work with extreme caution, as a raised vehicle can be very unstable.

7.5 WHEEL REPLACEMENT

When changing a wheel, always ensure the vehicle is positioned on a flat surface that allows it to be lifted correctly:

- only use the marked anchorage points to avoid damage to the vehicle (see previous paragraph);
- place the wedges under the wheels so that they are not lifted, to prevent movement of the vehicle;
- loosen the wheel nuts slightly (1/4 turn) before lifting the vehicle (**ATTENTION! Never completely unscrew a bolt if the vehicle is not lifted**).
- Regularly check the tyre inflation pressure. The pressure must be 2 bar/29 PSI (see label page 16);
- check tyre wear status. The tread block height shall not fall below 2 mm.



- always make sure that the wheel nuts are loose and cross-tightened (a-c-d-b) (photo A);

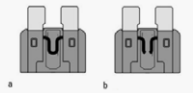


- lift the vehicle and remove all wheel nuts;
- remove the hub cap (photo B);
- the wheel can be removed and replaced;
- always use the same dimensions and the same type of wheel for all 4 wheels of the vehicle;

- only use tyres 215/35-12" with equivalent PCD, CB and ET specified by the manufacturer;
- when mounting a new wheel, operate in reverse to the above;
- insert the hub cap and tighten the wheel nuts with a $90\text{Nm} \pm 5\text{Nm}$ torque;

- check tightening of the wheel nuts after a few days of driving.

7.6 ELECTRIC FUSEBOX POSITION



In the event of a malfunction of the electrical system, it is advisable to check the fuses available on board. In case of failure, it is necessary to restore the damaged fuse with one of equal amperage. To understand if a fuse is damaged, the internal filament must be analysed as in the following image where **a** represents an **OK fuse** while **b** represents a **NOT OK fuse**.

There are two types of fuses on the vehicle, those for the traction part and those for the accessories. Those related to traction are available in compartment 11 of page 29 near the vehicle control inverter.



These fuses have three sizes, one 5A beige that protects the controller, one 30A green that protects the branch intended for the battery charger and the third 350A that



instead protects the power supply from the batteries.

The version not fitted with headlights (accessory) includes a fuse in the batteries area, visible in the side image. This fuse has a copper protection that feeds the USB socket. The size is 10A and the colour red.

In the version fitted with headlights (accessory), the protection fuses are found on the lighting system and the 12V produced by the DC-DC converter (they can be checked in compartment 5 on page 28). Both fuses are 10A and red.

7.7 ELECTROMAGNETIC BRAKE RELEASE

In an emergency, you can manually intervene (using the special kit provided) to release the electromagnetic brake.

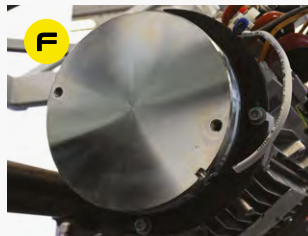
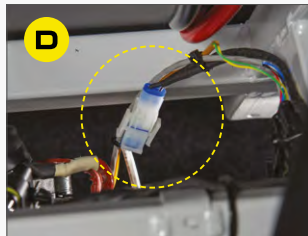
Place wedges under the raised wheels to prevent the vehicle from advancing.

All interventions must be performed by authorised and qualified staff, after reading and understanding this manual, using appropriate professional procedures and tools:

1. remove the inverter panel (photo C);
2. disconnect the brake electrically, detaching the connector (photo D);
3. remove the plastic screw caps in each access hole by means of a 12 mm wrench or a screwdriver (photo E- F);
4. screw the supplied M5x30 screws in each hole to compress the internal springs and allow the clutch disc to rotate freely (photo G - H).

To reactivate the electromagnetic brake:

1. remove the M5x30 screws;
2. insert the previous plastic screw caps by about 5 mm (screwing them up to the stop);
3. electrically connect the brake, attaching the connector;
4. Reposition the inverter panel.



7.8 CLEANING

All cleaning operations must be carried out with the vehicle stopped and disconnected from the electrical mains.

To clean the vehicle, do not use aggressive detergents or solvents which could damage the bodywork. Remember in particular not to wash the steering wheel with detergents/chemical agents which could cause its deterioration.

Use a cloth soaked in water and soap and dry thoroughly. The vehicle must not be washed and dried in direct sunlight to avoid damaging the bodywork.

Pay particular attention to cleaning the windscreen. The operation should be carried out with a damp, microfibre cloth and a neutral detergent for glass.

Non-compliance with the instructions above could cause scratches on the windscreen with irreversible effect.



ATTENTION! It is made strictly forbidden to use water jets even at low pressure: the electrical components could get damaged. Before washing the vehicle, check the cap on the vehicle charging socket and the plug of the USB charging socket are properly sealed.

7.9 MAINTENANCE INTERVALS

The following maintenance intervals must be respected to validate the warranty and allow efficient use of the vehicle.

- 12 months/360 service hours
- 24 months/720 service hours
- 36 months/1080 service hours

In addition to these maintenance intervals, the vehicle owner should carry out certain daily, weekly and monthly checks/interventions.

If the vehicle is not working properly, contact support.

Any maintenance intervention not falling within those specified in this manual, must be performed by official service staff.

Always remind your local dealer/repair shop to record all the interventions performed on the interval table on the following page.

INTERVALS TABLE:

Battery fluid 1 TIME/MONTH*					
/...../.....		/...../...../...../.....
Brake fluid 1 TIME/YEAR*					
Tyres wear 1 TIME/YEAR*					
Pad wear on brakes 1 TIME/YEAR*					

You are advised within the first two years to replace the differential oil every now and then (75W80)
*Indicate the date of each intervention.

8. SPARE PARTS ACCESSORIES

8.1 SPARE PARTS

Contact the dealer for any parts.
ALWAYS USE ORIGINAL SPARE PARTS

The manufacturer cannot be held liable for breakages, malfunctions or damage to people or property deriving from use of non-original spare parts.

For the list of spare parts, refer to the manufacturer.

9. TROUBLESHOOT- ING

a. The brake pedal has a spongy feeling and does not oppose resistance:

I. Do not drive the vehicle as there could be a braking circuit problem.

II. Purge the braking circuit with the help of a specialist technician, restore the oil level in the brake tank and evaluate if the pedal has returned to normal consistency. If not, contact customer support.

b. The steering wheel is not straight when driving in a straight line:

I. It is possible that an obstacle was hit with a front wheel, you should contact a specialist ALBA technician to check for possible damage to the steering system.

c. The charger does not charge the vehicle:

I. Check the charging socket has been inserted correctly by screwing the ring nut in an appropriate manner

II. Check that the charging light is not abnormal but is flashing green or fixed-

III. The battery charger could heat in extreme temperature conditions. Leave it to cool and restart charging.

IV. Disconnect and reconnect the recharging socket.

V. If the problem persists, contact ALBA customer service.

d. The vehicle has reduced autonomy:

I. Check the status of the batteries

II. One or more batteries may be worn.

III. If the problem persists, contact ALBA customer service.

e. The vehicle does not move

I. Check you have correctly positioned the key contact 'ON' and the dashboard is on

II. Check you have inserted the "D" or "R" gear

III. Check the level of the batteries is sufficient

- IV. If the problem persists, contact ALBA customer service.
- f. The vehicle drives at low speed:**
- I. Check the battery charger status indicator has at least one green led on. With a reduced charge status, the vehicle drives at low speed and limited power to avoid damaging the batteries.
 - II. If the problem persists, contact ALBA customer service.
- g. In the event of an electrical fault:**
- I. Switch off and back on, after approx. 15 seconds, the key contact to reset the errors in the controller
 - II. If the problem persists, contact ALBA customer service.
- h. The lights are not working:**
- I. Check the fuses are not burnt
 - II. Check the DC-DC battery charger is not faulty or presents anomalies.
 - III. Check the presence of the 12V on the USB. If absence, the problem is linked to DC-DC and it must be replaced.
 - IV. If the problem persists, contact ALBA customer service.

10. ADDITIONAL INSTRUCTIONS

10.1 DECOMMISSIONING AND DISMANTLING

On dismantling, the parts must be separated in plastic material, metal material and electrical parts, which must be sent for differentiated waste collection in compliance with legislation in force.

For the metal mass of the vehicle, simply sub-divide the ferrous parts from the other metal or alloy parts, to correctly send them for melt-down in recycling.



Battery and Accumulator Manufacturer
Register no. IT21110P00007459

www.albamobility.it



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