

S1 Electric Trolley Instruction Manual

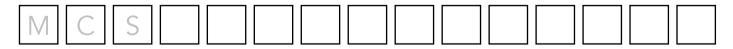


### Locating your Serial Number

The serial number for your S1 trolley is located on the underside of the battery tray. This number is required when registering your warranty online and should be kept handy for future use.

The same number should also be on the box received with your trolley. Please ensure you keep hold of the packaging in case you need to return your trolley for any reason. A proof of purchase must also be kept in case your trolley requires servicing during its warranty period.

# Please keep a record of your trolley serial number here for future reference



## Attaching the Wheels

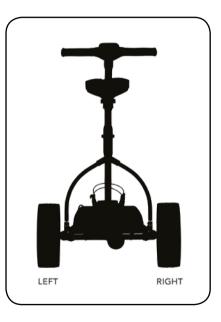
There is a left and a right wheel and it is important that you don't put them on the wrong way round, otherwise the trolley will not move. You will find there is an "L" and "R" on the inside of the wheel on the central hub. Left and Right sides are determined when stood behind the trolley at the handle.

To attach the wheels follow these simple steps:

- 1. Slide and hold the quick-release button to the right
- 2. Push the wheel on to the axle as far as it will go
- 3. Release the button and pull the wheel outwards slightly to lock
- 4. A small click will confirm they are in the correct position

The outer groove can be used as a "free-wheel" option if you run out of battery power during a round of golf.

**IMPORTANT:** To check you have attached the wheels correctly onto the inner groove, you will find they will only rotate freely in one direction.



### **Battery Care and Advice**

All batteries must be charged as soon as possible after each use. Leaving batteries discharged for long periods of time will affect the battery life.

Please ensure that only batteries supplied by Motocaddy are charged with Motocaddy chargers. Cyclic battery chargers are designed specifically in accordance with the battery manufacturer's requirements. The Lithium battery charger MUST NOT be used to charge any other battery and is designed for use with Motocaddy Lithium batteries only.

The charger should only be connected to an earthed socket outlet; the battery charger should only be opened and maintained by authorised personnel. Unauthorised opening will invalidate your warranty.

The battery must be stored and charged on a dry non-carpeted surface and charged at temperatures ranging between 10°C and 30°C. Charging above or below these temperatures is not recommended as it can reduce the battery capacity.

When connecting your battery to the trolley, please ensure that the connections match up black to black and blue/red to blue depending on your battery type.

## **Charging your Lead-acid Battery**

- 1. Disconnect and remove the battery from the trolley
- 2. Plug the charger into your mains supply
- 3. Attach the battery cable to the charger matching the red and black connections
- 4. Follow the charger LED indicator stages shown below:



- 5. Once charging is complete please disconnect the charger from the mains power supply
- 6. Finally disconnect the charger from the battery

NB : Never charge the battery outside or in conditions that may allow moisture to penetrate the charger or connections. If the battery is not used for prolonged periods of time, please charge your battery at regular intervals (every 6 weeks). Please do not leave it on charge or connected to the charger.

The battery should be charged for at least 12 hours before using it for the first time, please be aware that the charger can take up to a further 8 hours to show fully charged once the battery has reached 90% charge.

## **Charging your Lithium Battery**

- 1. Unplug your lithium battery from your trolley. This should always be done before folding the trolley to avoid damage to the battery and/or trolley
- 2. Plug the charger into your mains supply
- 3. Attach the battery cable to the charger matching the black and blue connections
- 4. When the charging led indicator has turned green, the battery is fully charged and ready to be used
  - RED Battery Charging

GREEN - Battery fully charged and ready to be disconnected

- 5. The charging process will take between 3 to 5 hours depending on the depth of discharge (please be aware that this may take longer for the first few charges)
- 6. Once charging is complete please disconnect the charger from the mains power supply
- 7. Finally disconnect the charger from the battery

## Caring for your Lithium Battery

- Try to avoid getting the battery too wet (i.e. do not submerse the battery, try to avoid deep puddles and do not clean your trolley whilst battery is still in the battery tray)
- Dropping the battery may cause damage to the internal cells
- Do not lift or carry the battery by the cable
- Use a damp cloth to clean off any dirt

### Recommendations for the hibernation of Lithium Batteries during Winter months

If for any reason your lithium battery is not going to be used for lengthy periods, e.g. 3 months over the winter, it is advised to store the battery half charged. To do this simply use the battery for a round of golf as usual and charge it for 1.5 hours at the end of the round. Before the battery is used again, recharge it (top it up) prior to use. We recognise that extended absences are not always planned in advance, however when it is likely that you will not be using your battery for a period of time it is good practice to follow these steps to extend the life of your lithium battery. Please ensure that the charger is ALWAYS disconnected from the battery after charging.

### Lithium Battery Management System (BMS)

Motocaddy Lithium Batteries are fitted with a comprehensive battery management system (BMS) to protect the battery from excessive abuse, high currents, deep discharge and overcharge. When the battery is delivered there may be no output as the BMS is designed to maximize safety whilst shipping. Please ensure that the battery is fully charged prior to connecting it to your trolley as this will activate the BMS and effectively "switch-on" the battery. From time to time, at deep discharge or long term storage the BMS may switch-off the battery. A full battery charge will rectify this problem.

Motocaddy golf trolleys are designed to work with the BMS system installed in the Lithium batteries and the voltage meter is also synchronised to work in conjunction with the battery. If for any reason the voltage on the battery reaches that below the low battery warning on the trolley, then the BMS may disable the battery to protect it. Again if this occurs please recharge fully. Please be aware that Lithium batteries tend to "drop off" quickly at the end of the cycle so it is not advisable to attempt to play excessive holes as the BMS will activate for protection purposes.

## Unfolding your Trolley

- 1. Pull the clip to release the locking system (fig. 1)
- 2. Raise the wishbone to the vertical position (fig. 2)
- 3. Hook the lower part of the frame into the clip (fig. 3)
- 4. Simply unfold the upper part of the frame then pull the clip again to lock the upper frame in place (fig. 4)
- 5. Unfold the upper bag support (fig. 5)











## Folding your Trolley

Make sure the upper bag support has been folded up.

Simply pull the clip and fold the main frame in half, fold the wishbone down and pull the clip to lock in place.

# Using the Lower Bag Supports

This Motocaddy trolley is fitted with the new EASILOCK™ bag attachment system.

If you are using an EASILOCK<sup>™</sup> compatible cart bag please follow these simple instructions:

- 1. Remove the two pre-fitted lower bag straps by depressing the rear button and sliding (fig 1)
- 2. Match up the indicating line on your cart bag with the line on the lower bag support
- 3. Lower bag until the pins lock in position

If you are using a non-EASILOCK™ bag, please use the following instructions:

- 1. Stretch the elasticated strap around the bag
- 2. Loop the rounded bar underneath the hook (fig. 2)
- 3. Position the two placement straps centrally on your cart bag (fig. 3)

Please ensure the straps are hooked in place securely before releasing. Failure to do so could result in injury to the user.













## Using the Upper Bag Supports

The upper bag support straps can be secured using the same steps as the non-EASILOCK instructions overleaf:

- 1. Stretch the elasticated strap around the bag
- 2. Loop the rounded bar underneath the hook (fig. 2 previous page)
- 3. Position the two placement straps centrally on your cart bag (fig. 3 previous page)

## Adjusting the Bag Supports

The bag support straps are manufactured from elasticated material to allow your golf bag to be held tightly in place.

The strap should be adjusted to be reasonably tight around the golf bag:

- 1. Unclip the elasticated straps from the housing by pulling outwards in the direction shown by the arrows (fig. 1)
- 2. Move the bar as required to tighten or loosen the strap fitting. Pulling the bar downwards will tighten, pushing it upwards will loosen (fig. 2)
- 3. Ensure that the straps are clipped back in to the housing before use (fig. 3)



Fig 1



Fig 2



## Safety Cut-out

Your Motocaddy trolley is fitted with a safety cut out feature which will help prevent damage to your trolley in the event of it being inadvertently switched on and in a position where it is not able to move for 30 seconds. If this should occur, the trolley will automatically cut the power to the motor.

If your trolley has cut out for this reason, you will see an "L" where the speed setting would usually be shown and the left hand LED will still be lit (fig. 1).

Pressing the on/off button will reset your trolley.

## Safe use of your Trolley

- Your Motocaddy trolley is designed for the transportation of golf bags and clubs contained within. Using the trolley for any other reason may cause damage to the trolley and cause harm to the user
- Do not attempt to transport any other equipment
- The trolley is not designed for the transportation of people
- Do not use the trolley to assist you when going up hills
- Submerging the trolley in water (eg a lake) is likely to cause damage to the trolley
- Do not operate the trolley whilst under the influence of drugs or excessive amounts of alcohol
- All batteries must be disconnected from the trolley before transporting
- Lead acid batteries must be removed from the battery tray before transporting your trolley
- Always use the carry strap when moving and transporting lead acid batteries



Fig 1

## Caring for your Trolley

Although your Motocaddy Trolley has been weatherproofed, please follow these simple guidelines to help protect your trolley:

- Do not store your trolley outside
- Try to minimise exposure to rain as much as possible with an umbrella during heavy rainfall
- Wipe excess water from the trolley prior to storage
- Never use a pressure washer to clean your trolley. To prevent water damage, wipe it down with a damp cloth
- Avoid using high pressure air hoses near moving components

Your Motocaddy trolley is designed to require very little maintenance; we do however recommend giving your trolley regular checks to ensure:

- There is no build up of excess mud and dirt
- The front wheel nut is on tightly and quick release lever is clamped down
- The front wheel is not clogged up and turns freely
- The battery bag and strap are intact and not damaged (lead acid batteries only)

Only original Motocaddy parts should be used when repairing your trolley.

# S1 Equipment Overview

### **S1 Equipment Overview**

- 1. Digital Control Panel
- 2. Upper Bag Support
- 3. Central Folding System
- 4. Folding Release Clip
- 5. Rear Wheels
- 6. Rear Wheel quick release button
- 7. Lower Bag Support
- 8. Battery
- 9. Battery Tray
- 10. Motor (Located under Battery Tray)
- 11. Front Wheel
- 12. Front wheel alignment adjusters
- 13. Battery Connector



## Using your S1

The S1 is extremely simple to control. The red button is used to turn the trolley on and off, whilst also controlling the speed of the trolley. The speed can be adjusted while the trolley is stationary or in motion. The trolley has 9 speed settings (1 to 9) with

1 being the slowest setting and 9 the fastest. To increase the speed, rotate the speed dial clockwise, or anti-clockwise to decrease the speed.

To start the trolley, simply select your required speed setting and press the button. The trolley will smoothly accelerate until it reaches the selected speed. To stop the trolley, simply press the button again - there is no need to reduce the speed setting.

There are two indicating LEDs below the speed display. The right hand LED displays the battery capacity (green, amber & red) and will illuminate as soon as the battery is plugged in. The left hand LED will illuminate when the power is on.



The trolley is designed to protect your battery from being fully discharged, should your battery capacity drop too low the trolley will cut the power to the motor. If this should happen you will see "b" flashing on screen.

#### Troubleshooting

In the unlikely event that your trolley develops a fault, you can be confident that your Motocaddy has been designed with an easy diagnosis system and incredibly simple parts to change.

Should your trolley develop a fault please follow the easy to use diagnosis diagrams (pages 16 & 17).

Whilst running through the diagnosis diagrams it is recommended that you place your trolley in the folded position and remove the wheels to enable easy handling.

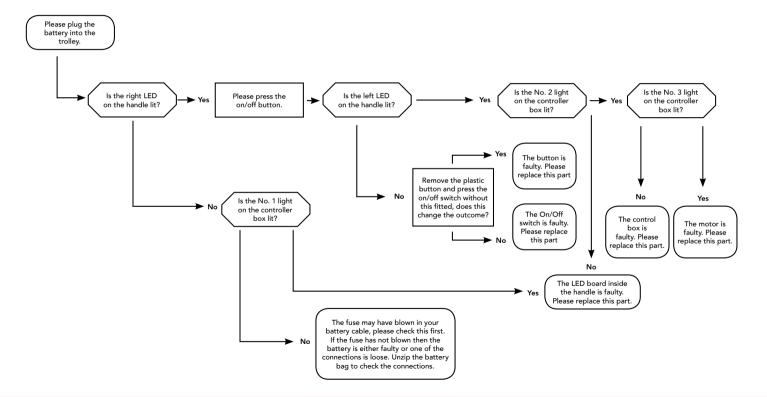
PLEASE NOTE : The lights on the controller box are numbered as described within the troubleshooting diagram.

1) In the event that your trolley will not complete 18 holes after a full charge:

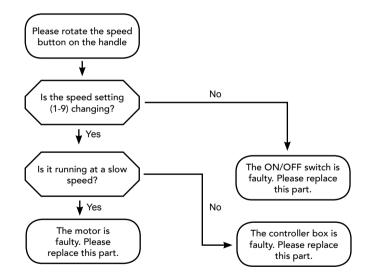
If this is the first time that your trolley has failed to complete 18 holes then we would suggest that you re-charge your battery as soon as possible and make sure that it has a full charge and the charger is functioning correctly. Once charged please try using the battery for one more round in case it had not charged properly before it's last outing. If your battery then fails to complete 18 holes again please contact our technical support team.

# Troubleshooting

2) If your trolley will not move please run through the following:



3) If your trolley is moving but is only going one speed, please run through the following:



## Adjusting the Front Wheel Alignment if your trolley is veering

In the unlikely event that your trolley is not tracking in a straight line, the alignment of the front wheel can be adjusted to rectify the fault. This problem can be caused by a number of factors including a slightly loose bag support or an unevenly packed golf bag. Should you wish to alter the alignment of the front wheel, follow these simple steps:

- 1. Lift the quick release lever positioned on the front wheel housing and loosen the wheel nut (fig. 1)
- 2. There are two small metal dials on either side of the housing that are used to realign the wheel (fig. 2)
- 3. If your trolley is veering to the right, you will need to turn the left hand dial clockwise and the right hand dial anti-clockwise
- 4. If your trolley is veering to the left, you will need to turn the right hand dial clockwise and the left hand dial anti-clockwise
- 5. Tighten the wheel nut and push down the lever to lock the wheel back into place (fig. 3)

This procedure can be carried out until you are happy the trolley is moving in a straight line (please note you may only need to adjust one dial at a time).

PLEASE NOTE : These instructions are based on being in front of the trolley looking at the wheel.



Fig 1



Fig 2





# DECLARATION OF CONFORMITY

ORIGINAL

#### **Business Name and Full Address of Manufacturer**

Motocaddy Ltd - Units 15-18 Stansted Distribution Centre, Start Hill Great Hallingbury

Hertfordshire CM22 7DG

#### Name and Address of Authorised Representative

Name and Address of the Person in Community Authorised to compile the Technical File (If different to above)

#### Description of product (Commercial Name)

Motocaddy Electric Trolley

#### Function, Model, Type, Serial Number

Function: Electric Trolley Type: Motocaddy Digital Range Model: S1/S1 PRO/S3 PRO/M1 PRO/M3 PRO S1 PRO DHC/S3 PRO DHC/M1 PRO DHC S7 REMOTE

#### Standards Used

BS EN ISO 12100 2010

#### Place of Declaration

Units 15-18 Stansted Distribution Centre, Start Hill Great Hallingbury

Hertfordshire CM22 7DG Date of Declaration Thursday, January 01, 2015

#### Declaration

I declare that the machinery fulfils all the relevant provisions of the following Directives:- Low Voltage Directive 2006/95/EC, Electromagnetic Compatibility Directive 2004/108/EC.

#### Person Empowered to Draw Up Declaration

Name: Tony Webb Position: Managing Director Signature:



Motocaddy Ltd, Units 15 - 18 Stansted Distribution Centre, Start Hill, Great Hallingbury, Hertfordshire, CM22 7DG

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We are dedicated to protecting the environment and encourage the recycling of Motocaddy products through a free collection and disposal service. To find out more or to locate your nearest Motocaddy recycling point, please contact us through our website.

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