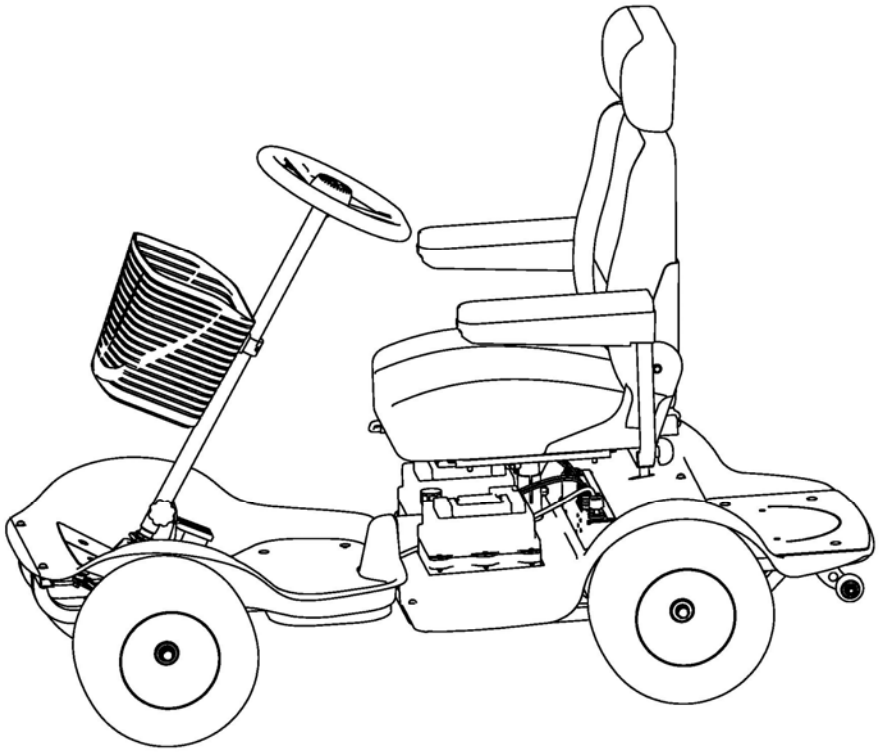
ChiefRider



# USERS MANUAL

## Revolution Steer

**—we ride—**

**Contact +86 400-660-4005**

**support@chiefrider.com**

**ChiefRider Scooter Corporation**

**Welcome** to ChiefRider . The product you have purchased combines state-of-the-art components with safety, comfort, and styling in mind. We are confident the design features will provide you with the conveniences you expect during your daily activities.

**Read and follow** all instructions, warnings, notes in this manual and all other accompanying literature before attempting to operate this product for the first time.

**Please fill out the following information for quick reference:**

ChiefRider Provider:_____

Address:_____

Phone Number:_____

Purchase Date:_____

Serial Number:_____

***This manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make changes as they become necessary. Any changes to our products may cause slight variations between the illustrations and explanations in this manual and the product you have purchased. The latest/current version of this manual is available on our website.***

***If you ever lose or misplace your product registration card or your copy of this manual, contact us and we will be glad to send you a new one immediately.***


INFMANU4813B/Revo Steer/Jan 2015

# CONTENTS

# I. UNPACKING

**Before** using your buggy, make sure your delivery is complete as some components may be individually packaged. If you do not receive a complete delivery, please contact your authorized ChiefRider Provider immediately. Where damage has occurred during transport, either to the packaging or content, please contact the delivery company responsible.

Your power buggy is shipped partially disassembled for protection during shipping. After unpacking, please check whether you have received the following main components as our standard specification(Figure 1).

1. **Basket**
2. **Steering Wheel ASM**
3. **Front Hal**f
4. **Rear Half**
5. **Power Charger**
6. **Captain Seat ASM**
7. **Battery groups** (2 pcs)


Figure 1

# II. SEAT ASSEMBLY

**Check** if your captain seat is packaged with the following main components(Figure 2).

►press the lock button and push down the **Head-rest**(s1) to your desired position
►let the button lock into the corresponding notch.

►Put the **Left Arm-rest**(s3) into the **Seat**(s2) frame and fitting your size.
►Lock the **Left Arm-rest** into **Seat**(s2) with one **Hand screw**(s4).

►Put the **Right Arm-rest**(s5) into the **Seat**(s2) frame and fitting your size.
►Lock the **Left Arm-rest** into **Seat**(s2) with another **Hand screw**(s4).

Lock the rest one **Hand screw**(s4) into **Seat**(s2) frame as spare for accessories.

s1. **Head-rest**
s2. **Seat**
s3. **Left Arm-rest**
s4. **Hand screw**(3 pcs)
s5. **Right Arm-rest**

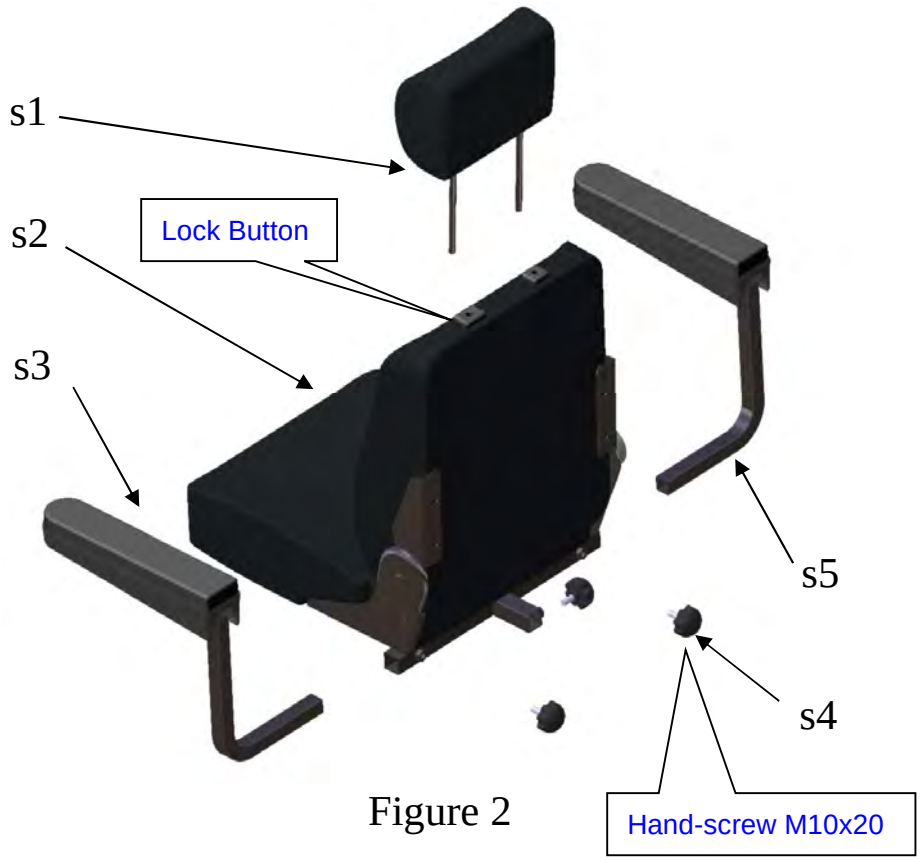



Figure 2

# III. MAJOR ASSEMBLY

**First** you can assembly the power buggy front half with rear(Figure 3).

Figure 3

►Push the **Front Half** shaft into the **Rear Half** tube(Figure 3.a).
►Make sure the spring latch locks into the slot.

►Connect the chassis wire harness to the controller with the right position(Figure 3.b).
►Turn the thread clock-wise to lock the harness connector.


Figure 3.a


Figure 3.b

**Second** assembly your steering wheel(Figure 4).


Figure 4

►Push the column into the steering stem post(Figure 4.a).
►Tighten the hand-screw to the column(Figure 4.b).

►Connect the steering wire and the chassis wire together(Figure 4.c).

Figure 4.a

Figure 4.b

Figure 4.c

**Third** assembly your basket(Figure 5).

Figure 5

►Press your basket down most along the clamp rail on column base(Figure 5.a, 5.b).

Figure 5.a

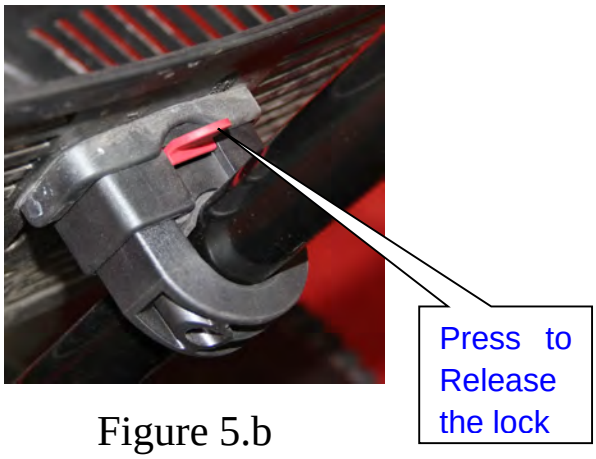



Figure 5.b

**Then** assembly your power battery groups(Figure 6).

Figure 6

►Check and turn off the key switch(Figure 6.a).
►Lift your battery groups and put them into the buggy one by one carefully.
►Connect the battery terminal houses to the controller post and make sure all the terminals are coding well(Figure 6.b).

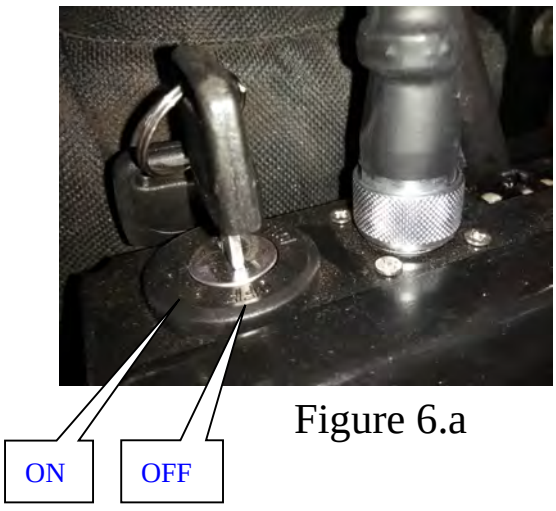



Figure 6.a

Figure 6.b

**Finally** assembly your seat(Figure 7).

Figure 7

►Lift your seat and put the shaft into the seat post(Figure 7.a).
►Push and turn your seat lightly on the seat post to lock the seat automatically(Figure 7.b).

Figure 7.a

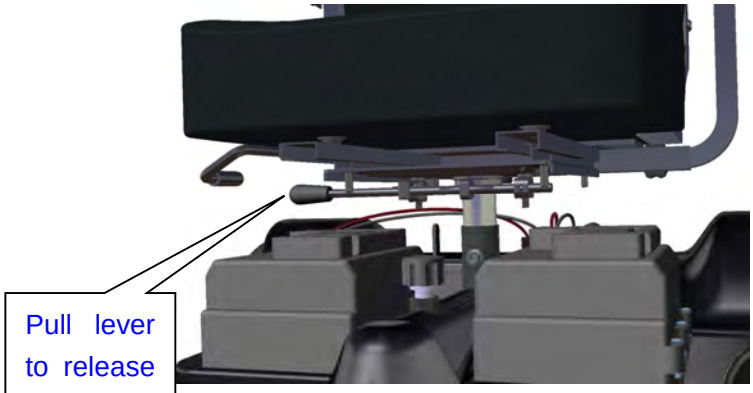



Figure 7.b

# IV. COMFORT ADJUSTMENT

**You** can find seat adjustment levers under your right hand(Figure 8).

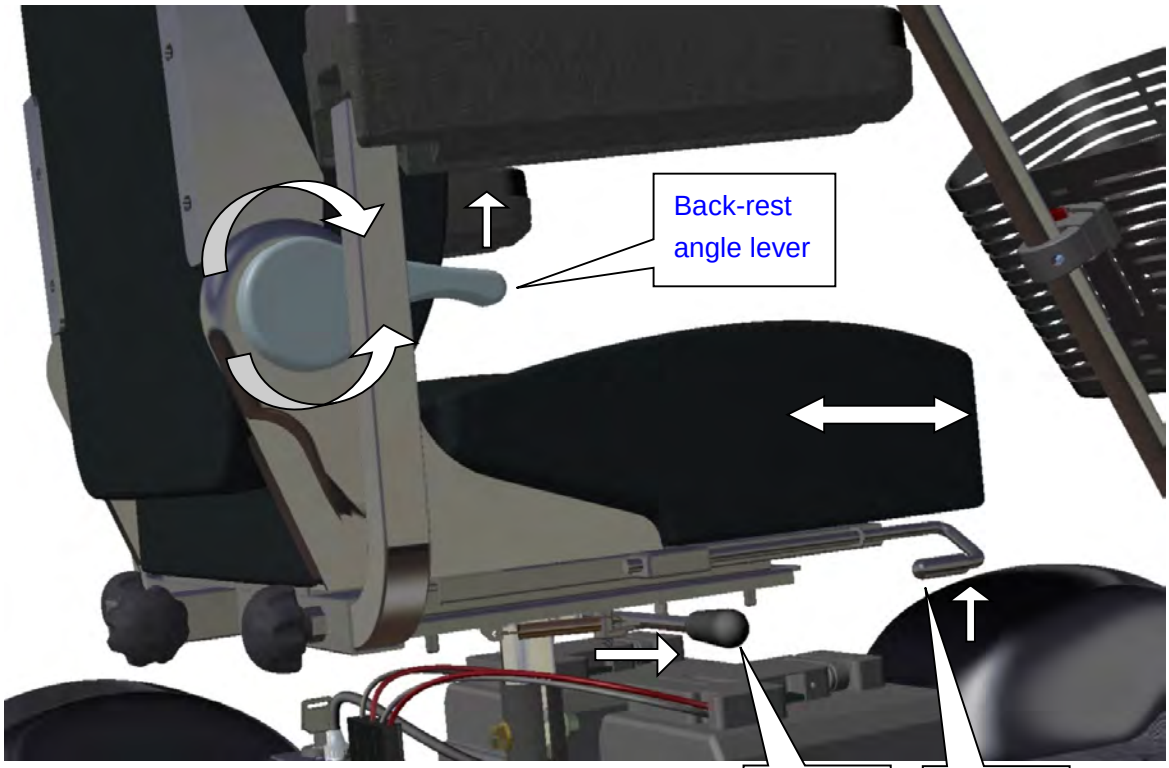



Figure 8

**A**. Seat position adjustment.
►Pull the position lever upward(Figure 8).
►Slide your seat backward or forward to your desired position.
►Adjust your back-rest to fit your comfortable position.
►Release the lever and lock your preferred position.
Note: Available distance from backward to forward is 180mm.

**B**. Back-rest angle adjustment.
►Pull the back-rest angle lever upward(Figure 8).
►Adjust your back-rest to fit your comfortable position.
►Release the lever and lock your preferred position.

**C**. Seat rotation adjustment(Figure 8.a, 8.b).
►Pull the rotation lever forward.
►Rotate your seat to your left or right side.
►Release the rotation lever and let the lever lock into the corresponding notch.
Note: The seat will lock in every 45° position automatically.

Figure 8.a

Figure 8.b

**D**. Head-rest height adjustment.
►Press the lock button(Figure 8.c).
►Lift up or down your head-rest to your desired position.
►Release the button and lock into the corresponding notch.

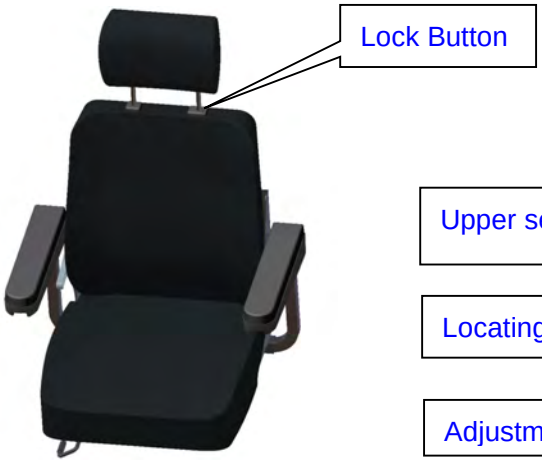



Figure 8.c

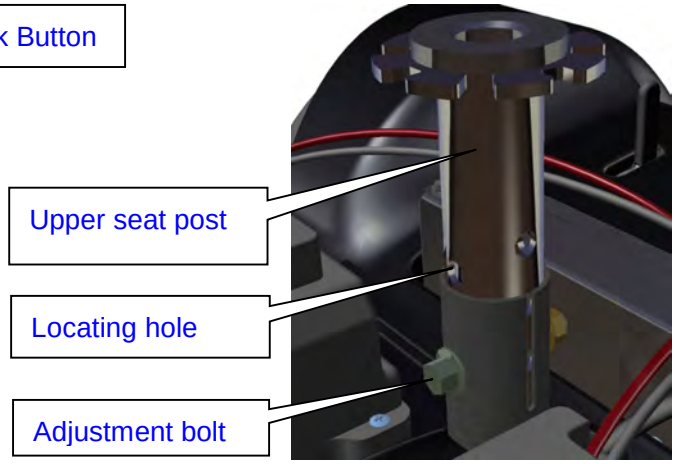



Figure 8.d

**E**. Seat height adjustment.
►Remove the seat, and screw out the adjustment bolt(Figure 8.d).
►Raise or lower the upper seat post to the desired height and match the locating holes.
►Reinstall the nut onto the adjustment bolt and tighten.

# V. SAFTY OPERATION

■ Make sure your batteries are Fully charged. See IV. “Batteries and Charging”
■ Always check the manual freewheel lever in the drive(backward) position(Figure 9.a).

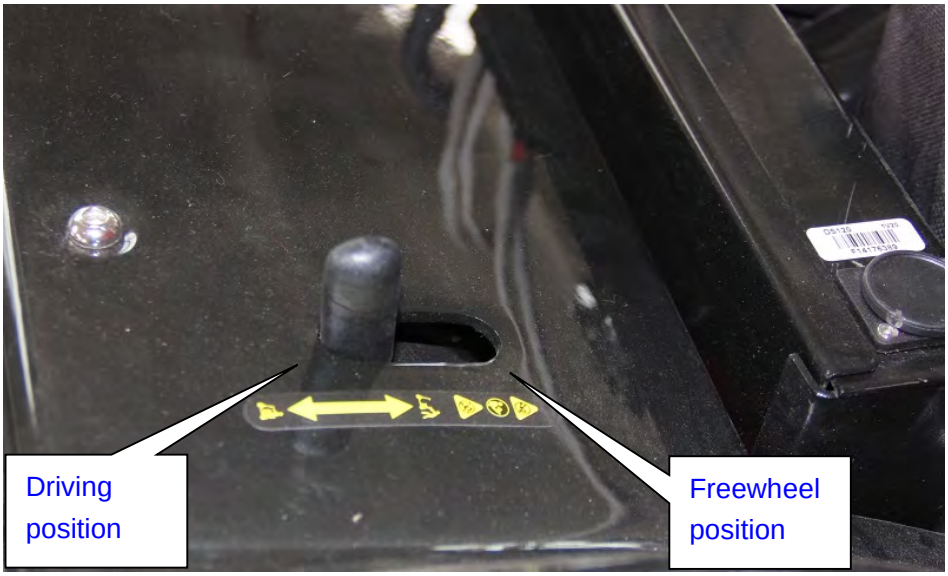



Figure 9.a

■ Always ensure the key switch is off when getting on and off your buggy(Figure 6.a).
■ Check you have selected the correct "forward or reverse" button position(Figure 9.b).

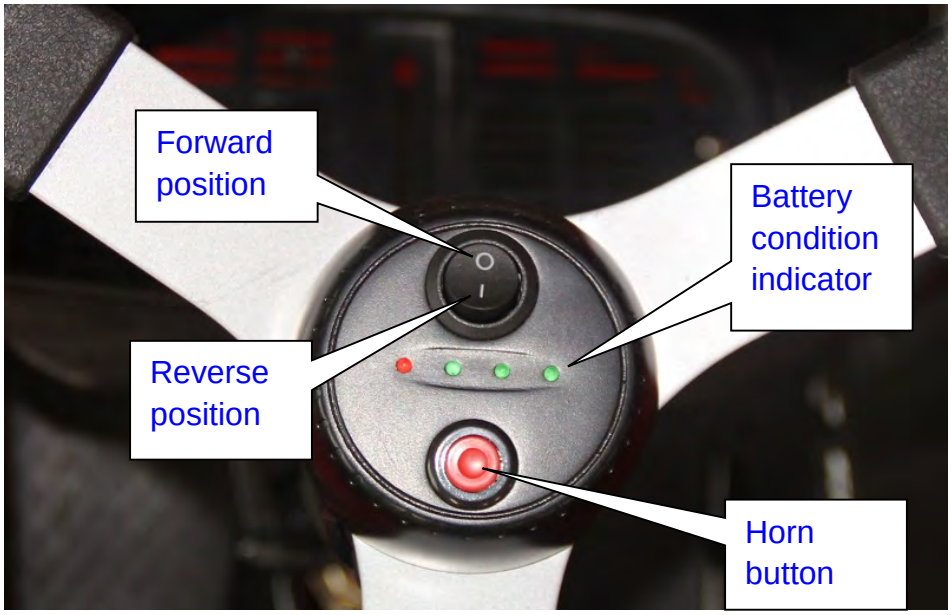



Figure 9.b

■ Always holding your steering wheel when driving.
■ Always start the buggy genteelly with your foot accelerator(Figure 9.c).

Figure 9.c

■ Always reduce your speed when you turning sharp.
■ Always getting off your buggy after it complete stop.
■ Power off your buggy and remove the key switch when you leave.

Your buggy is equipped with an energy saving automatic power down timer feature designed to preserve your buggy's battery life. If you mistakenly leave the key in the key switch and in the "on" position but do not use your buggy for approximately 30 minutes, the controller shuts down automatically.
If the power down timer feature takes effect, turn off and then on the key switch to resume normal operation.

Environmental conditions may affect the safety and performance of your power buggy. Water and extreme temperatures are the main elements that can cause damage and affect performance.
A) Rain, Sleet and Snow
If exposed to water, your power buggy is susceptible to damage to electronic or mechanical components. Water can cause electronic malfunction or promote premature corrosion of electrical components and frame.
B) Temperature
Some parts of the power buggy are susceptible to change in temperature. The controller can only operate in temperature that ranges between -13℉(-25℃) and 122℉ (50℃).
At extreme low temperatures, the batteries may freeze, and your power buggy may not be able to operate. In extreme high temperatures, it may operate at slower speeds due to a safety feature of the controller that prevents damage to the motors and other electrical components.

# VI. BATTERIES AND CHARGING

## BATTERIES AND CHARGING

Your buggy requires 4 long-lasting, 12-volt, deep-cycle batteries that are sealed and maintenance free(Figure 10.a).
They are recharged by an off-board charging system(Figure 10.b).

Figure 10.a

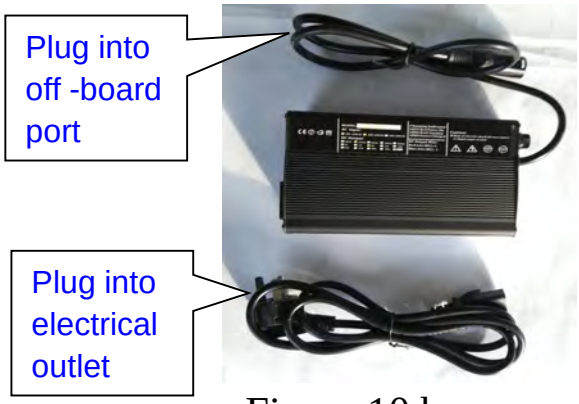



Figure 10.b

■Charge your batteries prior to using it for the first time.
■Charge the batteries every three months keep your buggy running smoothly.

## READING YOUR BATTERY VOLTAGE

The battery condition LED indicator on the steering wheel indicates the approximate strength of your batteries using a color code(Figure 9.b).
From right to left, three green indicates fully charged batteries, two or one green indicates a draining charge, and red indicates that an immediate recharge is necessary. To ensure the highest accuracy, the battery condition meter should be checked while operating your buggy at full speed on a dry, level surface.

## CHARGING YOUR BATTERIES

Removal of grounding prong can create electrical hazard. If necessary, properly install an approved 3-pronged adapter to an electrical outlet having 2-pronged plug access.
Never use an extension cord to plug in your battery charger. Plug the charger directly into a properly wired standard electrical outlet.
Do not allow unsupervised children to play near the buggy while the batteries are charging. We recommends that you do not charge the batteries while the buggy is occupied.
Read the battery charging instructions in this manual and in the manual supplied with the battery charger before charging the batteries.
Explosive gases may be generated while charging the batteries. Keep the buggy and battery charger away from sources of ignition such as flames or sparks and provide

adequate ventilation when charging the batteries.
You must recharge your batteries with the supplied off-board charger. Do not use an automotive-type battery charger.
Inspect the battery charger, wiring, and connectors for damage before each use. Contact your authorized ChiefRider Provider if damage is found.
Do not attempt to open the battery charger case. If the battery charger does not appear to be working correctly, contact your authorized ChiefRider Provider.
If the battery charger is equipped with cooling slots, then do not attempt to insert objects through these slots.
If your battery charger has not been tested and approved for outdoor use, then do not expose it to adverse or extreme weather conditions. If the battery charger is exposed to adverse or extreme weather conditions, then it must be allowed to adjust to the difference in environmental conditions before use indoors. Refer to the manual supplied with the battery charger for more information.

**Follow these easy steps to charge the batteries**:
► Position the rear of your buggy close to a standard electrical outlet.
► Remove the key from the key switch.
► Make sure that the manual freewheel lever is in the drive position.
► Plug the 3-pin charger power cord into the off-board charger port(Figure 10.c).
► Extend the charger and plug it into the electrical outlet.
► We recommend that you charge the batteries for 8 to 12 hours.
► When the batteries are fully charged, unplug the charger from the electrical outlet and then from the off-board charger port.

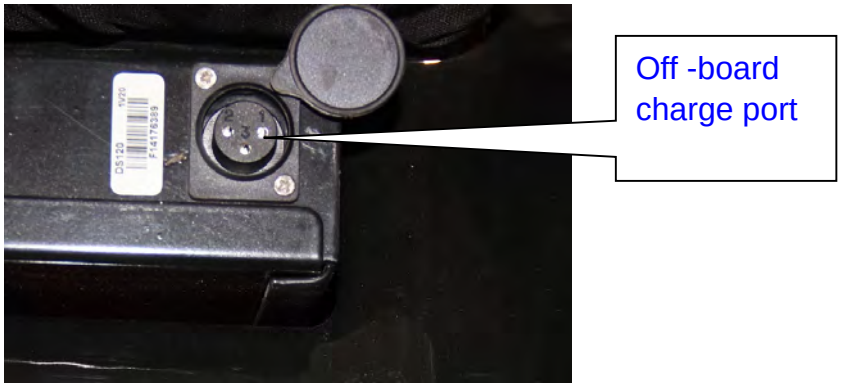



Figure 10.c

■ The LED lights on the charger indicate different charger conditions at various times: charger power on, charging in progress, and charging complete. Refer to the manual supplied with the charger for a complete explanation of these indicators.
■ There is a charger inhibit function on your buggy. The buggy will not run while the batteries are charging.

## FREQUENTLY ASKED QUESTIONS

**How does the charger work?**

When your battery voltage is low, the charger works harder, sending more electrical current to the batteries to bring up their charge. As the batteries approach a full charge, the charger sends less and less electrical current. When the batteries are fully charged, the current sent from the charger is at nearly zero amperage. Therefore, when the charger is plugged in, it maintains the charge on your batteries, but does not overcharge them. Refer to the manual supplied with the battery charger for charging instructions.

**What if my batteries won't charge?**

■ Ensure the red (+) and black (-) battery group cables are connected properly to the controller battery terminals.

■ Ensure both ends of the charger power cord are fully inserted.

**How often must I charge the batteries?**

Two major factors must be considered when deciding how often to charge your batteries:

All day use on a daily basis.

Infrequent or sporadic use.

With these considerations in mind, you can determine how often and for how long you should charge your batteries. We designed the off-board charger so that it will not overcharge your batteries.

However, you may encounter some problems if you do not charge your batteries often enough and if you do not charge them on a regular basis.

**Following the guidelines below will provide safe and reliable battery operation and charging:**

If you use your buggy daily, charge its batteries as soon as you finish using it for the day. Your buggy will be ready each morning. We recommend that you charge your batteries for 8 to 12 hours after daily use.

If you use your buggy once a week or less, charge its batteries at least once a week for 12 to 14 hours at a time.

■ Keep your batteries fully charged.

■ Avoid deeply discharging your batteries.

**How can I ensure maximum battery life?**

Fully charged deep-cycle batteries provide reliable performance and extended battery life. Keep your batteries fully charged whenever possible. Protect your buggy and batteries from extreme heat or cold. Batteries that are regularly and deeply discharged, infrequently charged, stored in extreme temperatures, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life.

**How can I get maximum range or distance per charge?**

Rarely will you have ideal driving conditions—smooth, flat, hard driving surfaces with no wind or curves. Often, you will face hills, pavement cracks, uneven and loosely packed surfaces, curves, and wind, all of which affect the distance or running time per battery charge. Below are a few suggestions for obtaining the maximum range per battery charge.

■ Always fully charge your batteries prior to daily use.
■ Maintain but do not exceed the psi/bar/kPa air pressure rating indicated on each tire.
■ Plan your route ahead to avoid as many hills, cracked, soft surfaces as possible.
■ Limit your baggage weight to essential items.
■ Try to maintain an even speed avoid stop-and-go driving.

**What type and size of battery should I use?**

We recommend deep-cycle batteries that are sealed and maintenance free. Both AGM and Gel-Cell are deep cycle batteries that are similar in performance. Do not use wet-cell batteries, which have removable caps.

**How do I change a battery in my buggy?**

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

■ Always use two batteries of the exact same type, chemistry, and amp hour(Ah) capacity.
■ Do not mix old and new batteries. Always replace both batteries at the same time.
■ Keep tools and other metal objects away from battery terminals.

Contact your authorized ChiefRider Provider if you have any questions regarding the batteries in your buggy.


Figure 10.d

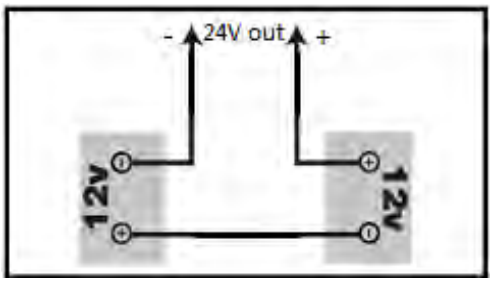



Figure 10.e

To change the batteries in your buggy, you may need the **Phillips screwdriver**.

► Open battery group packages and screw out the bolts on battery terminals(Figure 10.d).
► Change the old batteries with new batteries according diagram(Figure 10.e).
► Reinstall the terminal screws and boots cover the battery terminals.
► Reposition the battery group packages.

NOTE: If you encounter a damaged or cracked battery, immediately enclose it in a plastic

bag. Contact your local waste disposal agency or your authorized ChiefRider Provider for instructions on disposal and battery recycling, which is our recommended course of action.

**Why do my new batteries seem weak?**
Deep-cycle batteries employ a different chemical technology than that used in car batteries, nickel-cadmium batteries (nicads), and other common battery types. Deep-cycle batteries are specifically designed to provide power, drain down their charge, and then accept a relatively quick recharge.

We work closely with our battery manufacturer to provide batteries that best suit your specific electrical demands. Fresh batteries are shipped fully charged to our customers. During shipping, the batteries may encounter temperature extremes that can influence their initial performance. Heat diminishes the charge on the battery; cold slows the available power and extends the time needed to recharge the battery.

It may take a few days for the temperature of your batteries to stabilize and adjust to their new room or ambient temperature. More importantly, it takes a few charging cycles (partial draining followed by full recharging) to establish the critical chemical balance that is essential to a deep-cycle battery's peak performance and long life.

**Follow these steps to properly break in your new batteries for maximum efficiency and service life**:
► Fully recharge any new battery prior to its initial use. This charging cycle brings the battery up to about 88% of its peak performance level.
► Operate your new buggy in familiar and safe areas. Drive slowly at first, and do not travel too far from your home or familiar surroundings until you have become accustomed to your controls and have properly broken in your batteries.
► Fully recharge the batteries. They will be at over 90% of their peak performance level.
► Operate your buggy again.
► Fully recharge the batteries again.
► After four or five charging cycles, the batteries are able to receive a charge of 100% of their peak performance level and are able to last for an extended period of time.

**What if all the systems on my buggy seem to be dead?**
■ Make certain that the key is in the "on" position(Figure 6.a).
■ Check that the batteries are fully charged.
■ Ensure both battery cables and front-to-rear harness are firmly connected(Figure 6.b)
■ Be sure the manual freewheel lever in the drive (backward) position(Figure 9.a).
■ Turn off and then on the key switch to erase the system fault.

**What about public transportation?**
If you intend to use public transportation with your buggy, you must contact the transportation provider in advance to determine their specific requirements.

# VII. CARE AND MAINTENANCE

Your buggy requires a minimal amount of care and maintenance. If you do not feel confident in your ability to perform the maintenance listed below, you may schedule inspection and maintenance at your authorized ChiefRider Provider. The following areas require periodic inspection and/or care and maintenance.

**TIRE PRESSURE**

■ If equipped with pneumatic tires, always maintain the psi/bar/kPa air pressure rating indicated on each tire.

■ Regularly inspect your buggy's tires for signs of wear.

**CLEANING AND DISINFECTION**

■ Use a damp cloth and mild, non-abrasive cleanser to clean the plastic and metal parts of your buggy.

Avoid using products that may scratch the surface of your buggy.

■ If necessary, clean your product with an approved disinfectant. Make sure the disinfectant is safe for use on your product before application.

**BATTERY TERMINAL CONNECTIONS**

■ Make certain that the terminal connections remain tight and un-corroded.

■ The batteries must sit flat in the battery wells.

**WIRING HARNESSES**

■ Regularly check all wiring connections.

■ Regularly check all wiring insulation, including the charger power cord, for wear or damage.

■ Have your authorized ChiefRider Provider repair or replace any damaged connector, connection, or insulation that you find before using your buggy again.

**ABSPLASTIC SHROUDS**

The front front shroud, and the rear shroud are formed from durable ABS plastic and are coated with an advanced formula urethane paint. A light application of car wax will help the shrouds retain their high gloss.

**AXLE BEARINGS AND THE MOTOR/TRANSAXLE ASSEMBLY**

These items are all pre-lubricated, sealed, and require no subsequent lubrication.

**MOTOR BRUSHES**

The motor brushes are housed inside of the motor transaxle/assembly. They should be inspected periodically for wear by your authorized ChiefRider Provider.

**Accelerator, CHARGER, AND REAR ELECTRONICS**

■ Keep these areas free of moisture.

■ Allow these areas to dry thoroughly if they have been exposed to moisture before operating again.

**FUSE REPLACEMENT**

In the event a fuse should cease to work:

►Open the controller box and find the fuse box(Figure 11.a).

►Remove the fuse by pulling it out of its slot(Figure 11.b).

►Examine the fuse to be sure it is blown.

►Insert a new fuse of the same rating(8 amp).


Figure 11.a

Figure 11.b

**NYLON NAIL REPLACEMENT**

Any nylon insert lock nail removed during the periodic maintenance, assembly, or disassembly of the buggy must be replaced with a new nail. Nylon insert lock nails should not be reused as it may cause damage to the nylon insert, resulting in a less secure fit. Replacement nylon insert lock nails are available at local hardware stores or through your authorized ChiefRider Provider.

**STORING YOUR BUGGY**

If you plan on not using your buggy for an extended period of time, it is best to:

■ Fully charge its batteries prior to storage.

■ Disconnect the batteries from the buggy.

■ Store your buggy in a warm, dry environment.

■ Avoid storing your buggy where it will be exposed to temperature extremes.

Batteries that are regularly and deeply discharged, infrequently charged, stored in extreme temperatures, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life. It is recommended that you charge the buggy batteries periodically throughout periods of prolonged storage to ensure proper performance.

# APPENDIX . SPECIFICATIONS

| | |
|---|---|
| Model | Revolution Steer |
| Overall Dimension** | 1580mm×840mm×1150mm |
| Carton Dimension(main frame)** | 1300mm×900mm×450mm |
| Weight : W/O Batteries | 69 kgs |
| Heaviest Part (Disassembled) | 31kg (Rear Half) |
| Tires | 13" Tubeless |
| Standard Loading | 120 kgs |
| Max Forward/Reverse Speed* | 17km/h / 6km/h |
| Min.Turning Radius** | 2000mm |
| Climbing ability | 29% |
| Min Ground Clearance** | 90mm |
| Braking and Parking | Regenerative and Electromechanical Braking |
| Driving ECU | Dynamic 140A Programmable PM Controller |
| Transmission and Motor | Sealed Transaxle, PM DC Motor |
| Max.Range per Charge* | 50km; Options:80km |
| Power Source | 24VDC/40ah; Options:64ah |
| Batteries Specification | 12V20AH ×4pcs<br>Maintenance-free Lead-acid AGM Batteries |
| Battery Groups Dimension** | 205mm×160mm×200mm×2pcs |
| Battery Groups Weight | 14.9 kgs×2pcs |
| Charger | 24V/5A High Frequency Impulse Charger |
| Charging time | 8~12h，110VAC~250VAC |
| Seat | Reclining, with seat belt, head and arm rest |
| Seat Specification** | Weight:17 kgs<br>Material: Black Vinyl<br>Dimension: width - 460mm<br>depth - 440mm<br>Carton Dimension: 590mm×520mm×350mm |
| Colors | Metal Black Race Green |

The information contained herein is correct at the time of publication; ChiefRider reserve the right to alter specifications without prior notice.

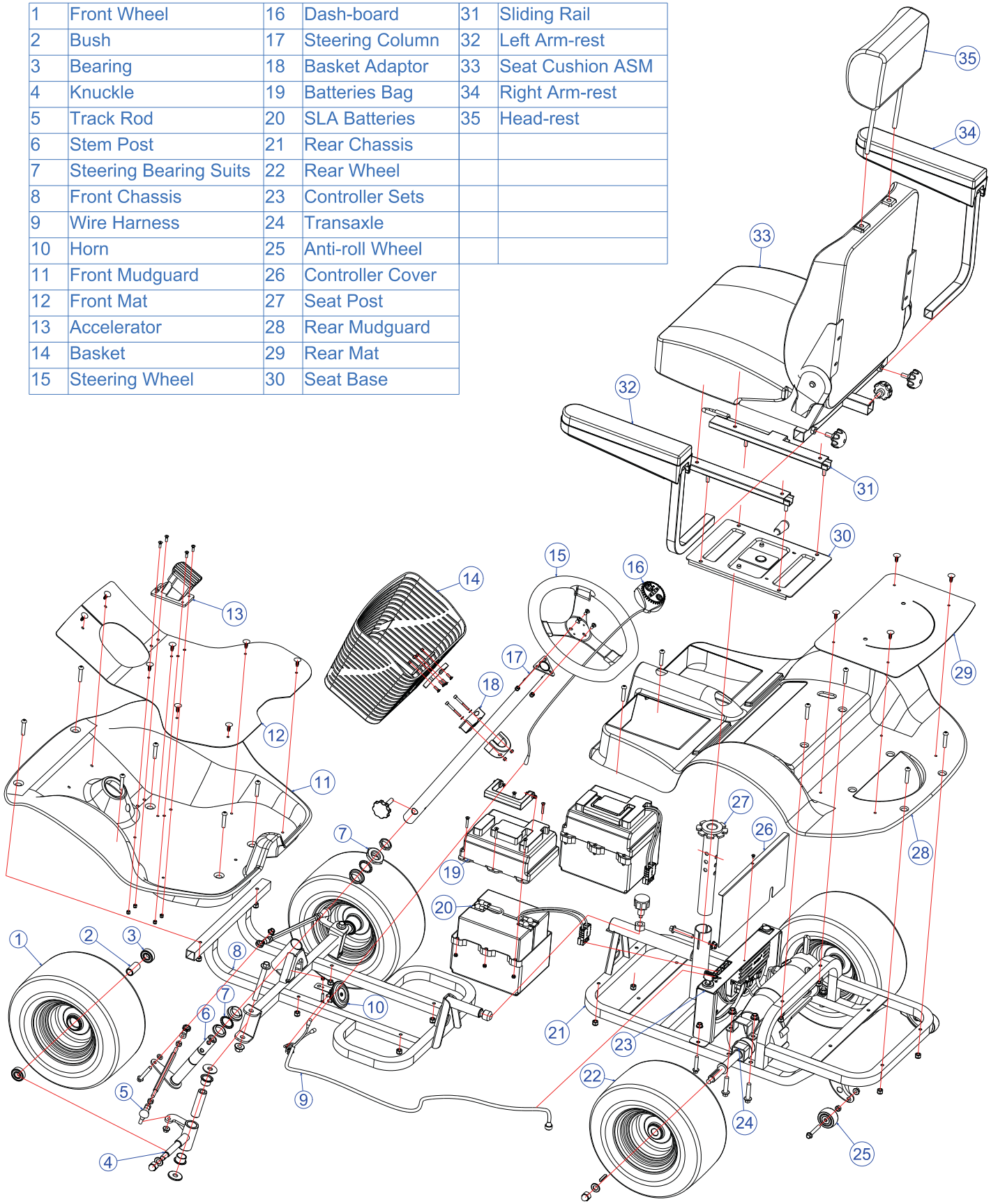
*Speed & range vary with user weight, driving inhabit, terrain type, charger, battery condition and tire pressure.

**Due to manufacturing tolerances and continued product improvement, this specification is subject to a variance of +/- 3%

- Check update at: http://www.chiefrider.com/

# Assembly Drawing

| | | | | | |
|---|---|---|---|---|---|
| 1 | Front Wheel | 16 | Dash-board | 31 | Sliding Rail |
| 2 | Bush | 17 | Steering Column | 32 | Left Arm-rest |
| 3 | Bearing | 18 | Basket Adaptor | 33 | Seat Cushion ASM |
| 4 | Knuckle | 19 | Batteries Bag | 34 | Right Arm-rest |
| 5 | Track Rod | 20 | SLA Batteries | 35 | Head-rest |
| 6 | Stem Post | 21 | Rear Chassis | | |
| 7 | Steering Bearing Suits | 22 | Rear Wheel | | |
| 8 | Front Chassis | 23 | Controller Sets | | |
| 9 | Wire Harness | 24 | Transaxle | | |
| 10 | Horn | 25 | Anti-roll Wheel | | |
| 11 | Front Mudguard | 26 | Controller Cover | | |
| 12 | Front Mat | 27 | Seat Post | | |
| 13 | Accelerator | 28 | Rear Mudguard | | |
| 14 | Basket | 29 | Rear Mat | | |
| 15 | Steering Wheel | 30 | Seat Base | | |




Revolution Steer


**—We ride—**

**Contact +86 400-660-4005**

**support@chiefrider.com**

**ChiefRider Scooter Corporation**

***INFMANU4813B***

**REVOLUTION STEER-UM-15-01**