

RFN Warrior - SX 400, 500, 700R

Owners Manual

WARRIOR KIDS OWNER'S MANUAL

User Manual




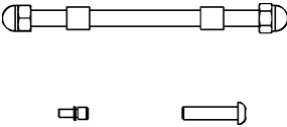


1. Notice: The illustrations are for demonstration purposes only. They may not reflect the exact appearance of the actual product. Specifications are subject to change. Please read and understand the entire manual before allowing children to use this product! Carefully read the instruction manual, thoroughly inspect all parts to ensure the child's riding safety and contact the dealer immediately if any issues are found.
2. Children should use the product under the supervision of parents or adults. Protective gear (such as helmets, gloves, knee pads, elbow pads, etc.) should be worn when riding. Note that this product is not intended for traffic use.
3. The bike should be stored in a dry and ventilated place.
4. Please comply with local laws or regulations; reduce speed and increase braking distance in rainy, snowy, or slippery areas to ensure safety.
5. Disassembly and replacement of parts by non-professionals are prohibited. The bike needs to be assembled and adjusted by adults, and children are not allowed to operate it.
6. Before riding, check whether all parts and screws are tightened, tyre pressure is normal, and brakes are functioning properly.
7. If the bike has power but cannot move, turn off the power immediately to avoid damaging the electronics.
8. Do not let hands, feet, body parts, clothes, or similar items come into contact with any rotating or moving parts (e. g. Wheels, disc brakes, etc.).
9. Only use the dedicated charger for charging the product.
10. Warning! Riders should be cautious as it requires skill to avoid falling or colliding, causing injury to the user or third parties.
11. Riding near rivers, on roads, in areas with heavy traffic, crowded places, or other potentially dangerous conditions is prohibited.
12. The maximum load capacity of the mini electric motorcycle is 50KG.
13. Warning: This series is only suitable for children aged 3-8 years old to ride.
14. Note that the packaging contains important information, please keep it.
15. Warning! Parents or guardians should ensure that children have received appropriate instructions on using the mini electric motorcycle, especially for the safe use of the braking system.

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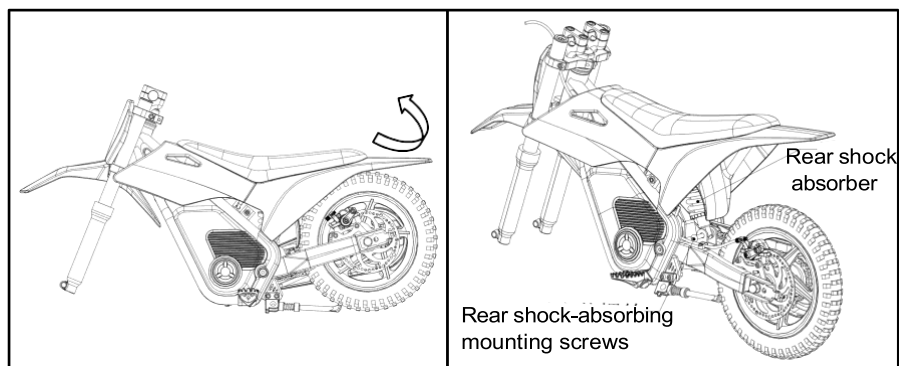
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1.Packaging Details

Serial No.	Name	Quantity	Illustration
1	Complete Vehicle	1	
1	Tool Kit	1	 A black rectangular box with the word "TOOLKIT" in white capital letters.
2	Front Mudguard	1	 A line drawing of a front mudguard, showing a curved, protective shield for the front wheel.
3	Front Wheel	1	 A line drawing of a front wheel, showing a tire mounted on a rim.
4	Attachments	1	 A line drawing of a long, thin metal rod with a hexagonal head on one end and a threaded end on the other. Below it are two small components: a short pin and a longer bolt.
5	Instruction Manual	1	 A black and white image of the instruction manual cover, featuring the text "RFN ELECTRIC OUT TAKE" and a stylized graphic.
6	Charger	1	 A line drawing of a charger unit, consisting of a rectangular box with a cable and a connector on one side and a plug on the other.

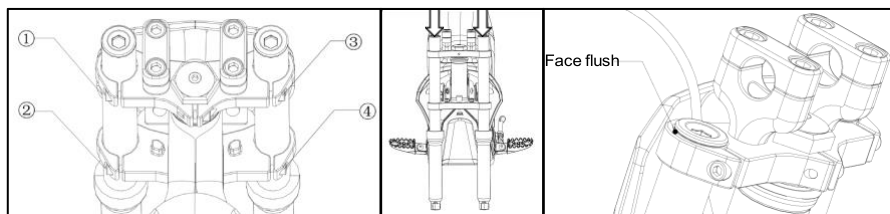
2.Complete Assembly

2.1 Rear Shock Absorber Installation Diagram



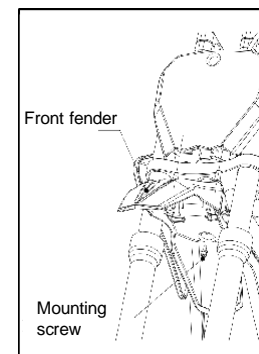
Lift the rear of the bike to align the lower end of the rear shock absorber with the mounting hole on the rear fork of the frame. Use a Torque Wrench to tighten the rear shock absorber mounting bolt (10-12 N. m).

2.2 Front Shock Absorber Installation Diagram



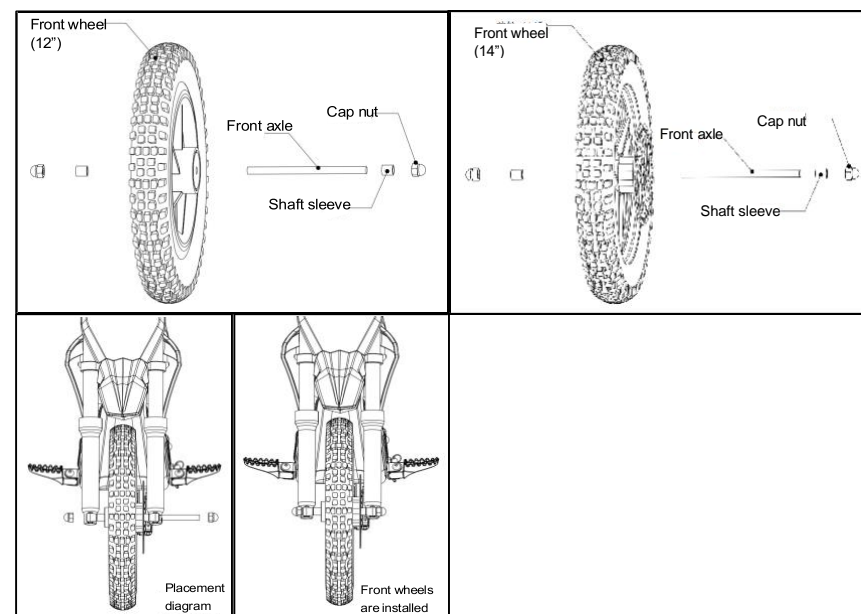
Use a tool to loosen the four fastening screws as shown in the diagram. Press the front shock absorber down until it is flush with the upper connecting board. Use Torque Wrench to Tighten the four screws (11-13 N. m).

2.3 Front Mudguard Installation Diagram



Align the front mudguard limiter buckle towards the back and attach it to the lower fork board. Insert the limiter post of the front mudguard into the inner limiter hole of the number plate. Use a torque wrench to tighten the front mudguard screw into the lower fork board mounting hole (8-10 N. m).

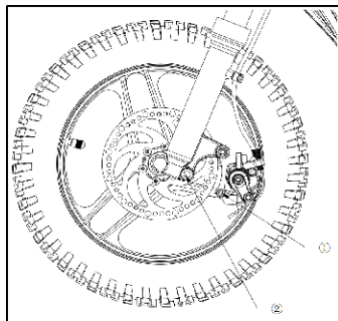
2.4 Front Wheel Installation Diagram



2. Complete Assembly

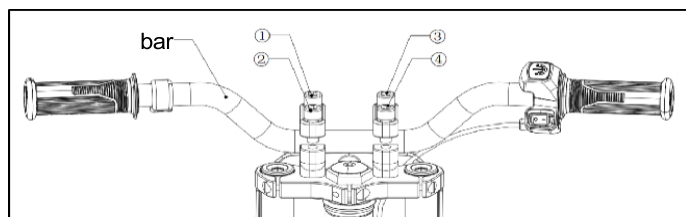
Place the front wheel in the middle of the front fork gap as shown in the diagram. Assemble as shown and use Torque wrench tighten the mounting nut onto the front wheel axle (25-30 N. m).

2.5. Front Disc Brake Installation Diagram



Remove the disc brake mounting screw from position ①. Rotate the disc brake to position ② and align the center hole. The disc brake caliper should align with the disc on the front wheel. Use the mounting bolts to tighten with a torque wrench (8-10 N. m).

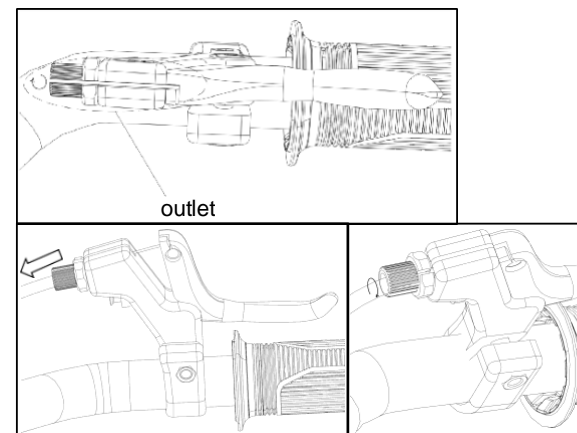
2.6. Handlebar Installation Diagram



Use a torque wrench to remove the four screws from the handlebar stem. Install the handlebar as shown in the diagram. Adjust the handlebar angle to a comfortable position. Use the mounting bolts and with a torque wrench tighten the four screws on the handlebar stem (10-12 N. m), ensuring the gap between the handlebar stem and the lower stem is even.

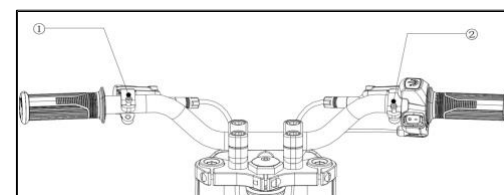
2.7. Brake Installation Diagram

2.7.1. Brake Cable Installation



Rotate the brake lever adjustment screw to align the opening with the cable outlet. Insert the brake cable head into the cable head seat of the brake lever. Pull the cable core into the brake lever outlet with a force of 10-15 kg. Finally, rotate the opening nut half a turn to misalign.

2.7.2. Left and Right Brake Lever Installation

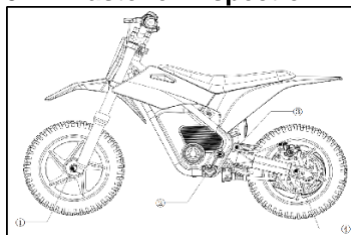


For model E500: Remove the brake lever fastening screws. Install the brake lever as shown in the diagram and pre-tighten. Move the left brake lever to 20-25 mm from the handlebar grip and adjust to a suitable angle. Use a torque wrench to tighten screw ① (8-10 N. m). Move the right brake lever to 10-15 mm from the throttle grip and adjust to a suitable angle. Use the mounting bolts and tighten with a torque wrench (8-10 N.m).

3. Operating Instructions

3.1 Riding Instructions

3.1.1 Fastener Inspection

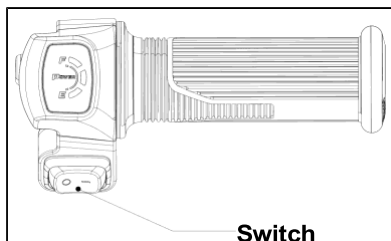


Before using this vehicle, you should inspect all fasteners as shown in the diagrams to ensure they are not loose. This is essential to prevent any safety hazards due to loosened fasteners.

No.	Name	Torque Value
①	Front Wheel Nut	25-30 N.m
②	Bottom Bracket Nut	10-12 N.m
③	Rear Shock Bolt	10-12 N.m
④	Rear Wheel Nut	25-30 N.m

3.1.2 Handle Operation

3.1.2.1 Power On/Off



The diagram shows the vehicle's power button. To operate the vehicle, use this button to turn the power on or off. The "I" position indicates that the vehicle is on, and the "O" position indicates that it is off. When the display lights up, the vehicle is in the on state; when the display lights go off, the vehicle is in the off state.

3.1.2.2 Speed Adjustment

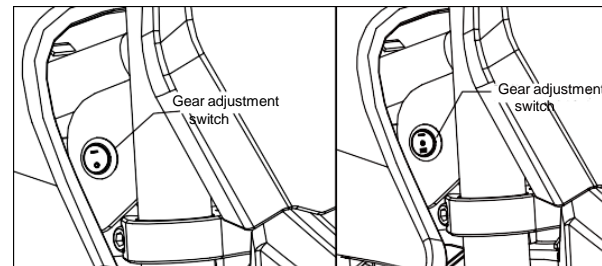
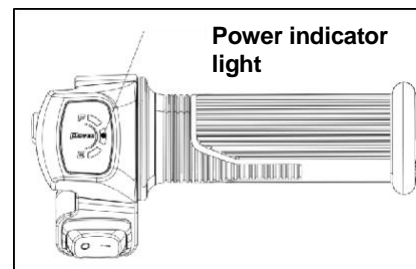


Figure 1

Figure 2

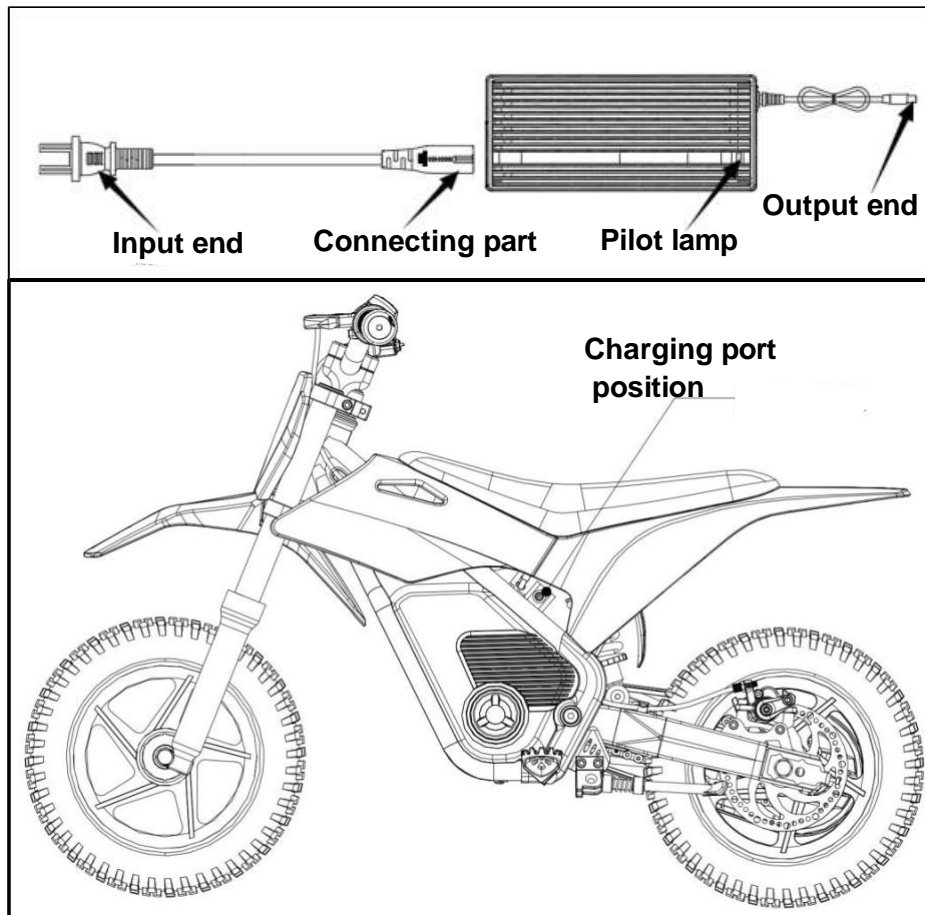
This series of products has two gear adjustment methods, which can be used for second or third gear speed regulation. Figure 1 shows the second gear speed regulation button, the switch is pressed to the "I" position for first gear, and the switch is pressed to the "O" position for second gear. Figure 2 shows the three-speed control button. The switch is pressed to the "O" position for first gear, pressed to the "I" position for second gear, and pressed to the "=" position for third gear.

3.1.2.3 Battery Display



The diagram shows the battery display function. The meter has three lights; when all three are lit, the battery is over 75% charged. When only one light remains and it changes from green to red, it indicates that the vehicle needs to be charged to continue riding.

3.2 Charging Instructions



Warning: Do not switch on the wall socket until it is fully connected to both the socket and the bike. To charge this product, connect the charger to the input end, then plug the input end into a household socket, and insert the output end into the charging port shown in the diagram to start charging the vehicle.

The charging mode is indicated by the color of the light at the depicted location. A red light indicates that charging is in progress, and a green light signifies that the battery is fully charged. It is important to disconnect the charger once the battery is fully charged to avoid damaging the battery. Note that there is no voltage output from the vehicle when the battery is charging.

4. Routine Maintenance

4.1 Electrical Component Maintenance Instructions

Lithium-ion batteries should be stored in a cool, dry, and ventilated environment, away from sources of fire and heat. The optimal storage temperature for batteries is 10-25°C, with the best humidity being 60±25%. Batteries should be stored at room temperature and charged to 20% to 40% of their capacity. To prevent battery over-discharge, it is recommended to charge and discharge the battery once every 3 months according to the standard charging and discharging method, and then charge it to 20%~40% of its capacity according to the standard charging method.

4.2 Brake Maintenance Instructions

4.2.1 Mechanical Brake Maintenance Instructions

① For vehicles with short usage time, Just fine-tune the adjusting nut on the brake to adjust the braking effect to the appropriate state;

② For vehicles with longer usage time, check the wear condition of the brake pads. If the brake pads are slightly worn, use an M5 Allen wrench to loosen the disc brake cable fixing nut, shorten the disc brake travel, tighten the fixing nut with the M5 Allen wrench, and then adjust the braking effect to an appropriate state;

③ For vehicles with longer usage time and severe wear of the brake pads, it is necessary to replace the brake pads to continue riding. To replace the front and rear disc brake pads, first remove the caliper fixing screw, use pliers to remove the clip, remove the pin, directly remove the two brake pads along with the spring, take out the two brake pads and the spring clip, then start installing new brake pads, attach the

same model brake pads to the spring, pinch the two brake pads together into the caliper, and follow the steps in reverse order to reinstall.

4.2.2 Hydraulic Brake Maintenance Instructions

If the braking performance is still not ideal after oil injection, it is necessary to replace the disc brake pads to continue riding. Use an M5 Allen wrench to disassemble the front and rear disc brakes, remove the brake pads, then install the same model brake pads into the disc brake, reinstall the front and rear disc brakes with an M5 Allen wrench, adjust the disc brake to avoid friction with the disc brake rotor, and then normal riding is possible.

Note: Professional personnel should perform these operations.

4.3 Transmission Maintenance Instructions

When maintaining the transmission, the chain should be cleaned promptly after riding the whole vehicle and lubricated regularly with chain oil.

4.4 Suspension System Maintenance Instructions

When maintaining the suspension system, pay attention to whether there is mud and water inside the rear shock absorber and on the travel tube of the front fork, as mud and water can cause the rear and front shock absorbers to stick during use. Clean and maintain regularly according to personal usage frequency to avoid a decrease in riding comfort.

Note: Professional personnel should perform these operations.

4.5 Tyre Maintenance Instructions

Measure whether the tyre pressure meets the tyre label pressure; if not, adjust the pressure by inflating or deflating. After supplementing the pressure, ensure to put on the valve cap.

Depending on the frequency of use, if the tyre tread is severely worn, the tyre needs to be replaced to continue riding.

4.6 Whole Vehicle Appearance Maintenance Instructions

After using the vehicle, first use a duster to remove surface dust, then wash with a water gun at low pressure, but wash from top to bottom and avoid important electrical parts such as the battery compartment, motor shaft, and controller, then dry the whole vehicle with a dry cloth and store in a dry, ventilated place.

4.7 Common Fault Troubleshooting Instructions

4.7.1 Throttle Troubleshooting:

If the battery is normal and the display screen lights up, then there is no fault with the display; if the display does not light up, there may be

a fault with the display or controller.

4.7.2 Motor Troubleshooting:

If there is no fault with the battery, display, or controller, and the motor operates normally when the throttle is turned, then the motor is normal; if the motor does not turn, then there is a fault with the motor.

4.7.3 Controller Troubleshooting:

If there is no fault with the battery and the display, and the motor operates normally when the throttle is turned, then the controller is normal; if the motor does not turn, there may be a fault with the motor or controller.

If any of the above faults occur, please contact the dealer for repair promptly.

5. Service Manual

5.1 List of guarantees

Name	Warranty period	Supplementary statement
Frame	12 Months	The warranty period is calculated on the date of the code slip
Battery		
Controller		
Electric Machine		
Charger		

5. Service Manual

5.2 Pre- Delivery Inspection

When the vehicle is handed over, the customer and the vehicle data must be completed.

Apollo RFN Warriors		PRE-DELIVERY INSPECTION DOCUMENT	
Unbox the vehicle		Check all frame bolts and fairings	
Check PDI box contents		Remove all protective wrapping on vehicle	
Check the charger plugs are UK		Lubricate/protect all pivot points	
Fit handlebars and clock pack*		Lubricate lock mechanism	
Fit indicators/head/tail lamps *		Ensure battery is charged to 50% minimum	
Fit mirrors & side reflectors*		Adjust headlamp alignment*	
Ensure all multiplugs located correctly		STATIC / ROAD TEST	
Connect battery power and data cables		Power up vehicle	
Check cable routing		Change Speedometer to MPH	
Check throttle operation/return		Check horn	
Fit front wheel to forks with spacers		Check indicators*	
Check front wheel axle and pinch bolts		Check side stand switch	
Check/adjust rear wheel alignment		Check brake cut-off switches	
Check/adjust drive chain tension		Check effectiveness of front/rear brakes	
Check rear wheel axle		Check all power modes working correctly	
Full inspection of wheel spokes		Clean vehicle prior to hand over	
Check/adjust tyre pressures F: R: PSI		Complete all documentation	

Name of Technician	Service Stamp	Date
Owners Signature		
By signing I can confirm that I have received the vehicle and had all controls explained to myself and have been made fully aware of all service schedules and warranty conditions and that any deviation from the schedule will void warranty		

5. Service Manual

5.3 Service record

When the vehicle is handed over, the customer and the vehicle data must be completed.

Congratulations on your purchase of your Apollo RFN. This bike is designed to offer a high-performance ride in varied environments. Whilst engineered to be both durable and reliable, like any performance enduro machine, correct maintenance and operator's checks are essential to ensure optimum performance and to maintain your warranty support. Please read your operators booklet prior to use and ensure your dealer has explained fully all features of the bike. We always recommend that genuine Apollo RFN parts and accessories are used to comply with your warranty terms.

Servicing should be carried out by an approved Apollo RFN dealer who has access to genuine parts and technical support.

1st Service	Actual Mileage	Date	Dealer Stamp
185 Miles (300 Km) or 3 Months*			
2nd Service	Actual Mileage	Date	Dealer Stamp
620 Miles (1000 Km) or 6 Months*			
3rd Service	Actual Mileage	Date	Dealer Stamp
1240 Miles (2000 Km) or 12 Months*			
4th Service	Actual Mileage	Date	Dealer Stamp
1865 Miles (3000 Km) or 24 Months*			
5th Service	Actual Mileage	Date	Dealer Stamp
2485 Miles (4000 Km) or 36 Months*			
Subsequently Every 12 Months or 620 Miles (1000 Km) *			

**Whichever comes first*

Warranty Terms

18 Months Chassis/Swing Arm/Motor/Controller, Battery up to 20,000 Miles
12 months Non-Service Items - *Subject to Service Schedule. Excludes items**

Model: ☐ **RFN Warrior Kids SX-E500** ☐ **RFN Warrior Kids SX-E400**

Colour: Chassis No: Date of Sale: Motor No:

5. Service Manual

Owner Name:

Email:

Address:

Town: Postcode:

County: Country:

Selling Dealer Stamp



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