



POWER BIKES



2024 RECON RANGER E-BIKE

Owner's Manual

This manual contains important safety, performance, and service information. Read it before you take your first ride on your new RECON Power Bike and keep it for future reference.

Introduction

Thank you for purchasing a RECON POWER BIKES RANGER E-Bike.

This Owner’s Manual provides important information regarding safety and maintenance of your new RECON POWER BIKES RANGER E-bike. Please read through the entire manual prior to operating your machine and save this manual for future reference. If, at any time, you have questions or need assistance with your RECON product, please contact us.

Thanks again for purchasing the RECON POWER BIKES RANGER E-Bike. We hope you enjoy the ride!

-RECON Team

RECON Power Bikes Contact Information:

General Information – info@reconpowerbikes.com
888-485-2589

Understanding this manual

This manual contains important information on how to assemble, safely operate, and properly maintain your RECON Power E-Bike. Read this manual prior to assembly and before your first ride so you are familiar with your E-Bike. Please be aware of the (4) safety messages below and what they mean. You will see them periodically throughout this manual.

▲ DANGER: This statement indicates a potential situation that can lead to a high risk of serious injury, death, or property damage.

▲ WARNING: These statements highlight situations that may be deemed hazardous and could result in serious injury, death, or property damage.

▲ CAUTION: These statements highlight situations that may be deemed hazardous and could result in minor to moderate injury or property damage.

NOTE: This is information that can help prevent bike/property damage. Reviewing these **NOTES** can help extend the life of the bike and its’ parts.



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⚠ WARNING: ADULT OPERATORS ONLY

RECON E-Bikes are intended to be used solely by an adult operator 18 years or older. Please follow the instructions contained in this manual before operating the machine.

⚠ DANGER: FOLLOW SAFE RIDING PRACTICES

- OPERATOR ONLY! NO PASSENGERS!
- Long hair, loose clothing, or loose items worn by the rider must be covered to prevent entanglement in moving parts of the machine or surroundings while riding.
- DO NOT EXCEED THE WEIGHT LIMIT (350 lbs.). Heavier riders may significantly reduce performance and/or render the vehicle unstable. They may also over-tax the brakes and other control devices. Exceeding the weight limit may cause structural damage not covered by the warranty.
- DO NOT TOUCH ANY MOVING OR HOT PARTS
- DO NOT RIDE AT NIGHT OR UNDER OTHER LOW VISIBILITY CONDITIONS
- DO NOT IMMERSE THIS VEHICLE IN WATER
- DO NOT RIDE ON STEEP OR UNEVEN SURFACES
- DO NOT RIDE FASTER THAN CONDITIONS PERMIT FOR SAFE OPERATION
- The rider should be comfortably seated on the bike, ready to ride, before turning it on.

⚠ DANGER: WEAR PROTECTIVE EQUIPMENT

Off-road riding presents many hazards such as loose dirt, obstacles, and other difficult-to-see and avoid conditions. Wear an E-Bike rated helmet, gloves, wrist, knee, elbow, and eye protection. Failure to use appropriate safety equipment greatly increases the risk of serious injury or death.

⚠ WARNING: PROPER MAINTENANCE IS REQUIRED

Failure to maintain this vehicle in proper operating condition can lead to an accident resulting in injury, death, and/or property damage. If you have any questions about the proper care and maintenance of this E-Bike, consult your dealer/distributor or contact RECON Customer Care at info@reconpowerbikes.com or 1-888-485-2589.

Color LCD Display Screen

Adjustable Seat



4" Kenda Fat Tires

17.5 Ah Battery
(Optional 21.0 Ah
Battery)

1000W Mid Drive Motor

RECON Power Bikes RANGER E-Bike Specifications:

Weight: 98 lbs. (including battery)

Motor: 1000w Mid Drive

Throttle: Thumb

Display: Color LCD Display w/Bluetooth

Battery: 17.5Ah LG Battery (Upgradable to 21.0Ah)

Charger: AC 110V

Frame: 6061 Aluminum Alloy

Fork: RST

Brakes: Tektro Dorado Quad Piston Hydraulic Brakes, 203mm x 2.3mm

Rim: 80mm Rim

Wheel/Tire: Kenda Juggernaut 26" x 4.0", w/K-Shield Liner

Derailleur: Shimano Alivio 9 Speed

Handlebar/Stem: Promax Adjustable

NOTE: The RECON POWER BIKES RANGER E-Bike is set at a maximum speed of 20 mph from the factory. Speed can be regulated by the end user to comply with local regulations.

SECTION 1: ASSEMBLY

⚠ WARNING: Incorrect assembly, maintenance, or use of your Ranger E-Bike can cause component or performance failure, loss of control, serious injury, or death. All operators of this E-Bike must read and understand the entire manual before riding. If you are not sure you have the experience, skills, and tools to correctly perform all assembly steps in the manual, consult a certified, reputable bike mechanic.

1. Unboxing:

Required Tools:

- Cutting pliers or utility knife (to cut box strapping and heavy bike banding) – not included
- Scissors (to remove bubble wrap and protective packaging materials) – not included
- 8mm, 10mm, and 15mm open-end wrenches – included
- 3mm, 4mm, 5mm, and 6mm hex wrenches – included
- 2.5mm hex wrench – not included

1. Cut and remove banding straps from exterior of box.
2. Locate and remove Tool Kit and Accessories Box containing the pedals, battery charger, hardware, front light, and tools.
3. Remove bike and remaining parts from the box. (**NOTE:** Lay box on side and slide bike out or use two people to lift it out.)
4. Cut the packaging straps to remove the front tire from the frame of the bike. (**NOTE:** Use caution when cutting the straps making sure to avoid brake lines and cables.)
5. Cut packaging straps to remove the fenders from the tires.
6. Cut packaging straps to release the handlebars from the bike frame. (**NOTE:** Check to make sure the cable connections did not pull apart or disconnect during this step or in shipping.)
7. Remove remaining bubble wrap, foam, and other shipping materials from the bike.

2.) Handlebar installation:

1. For shipping reasons, the handlebar stem may be shipped facing in the reverse direction. Spin the stem to the correct, forward-facing position. (**NOTE:** The stem bolts will still be loose. These will be tightened after the front wheel is installed to ensure proper alignment.)
2. Using the 4mm hex wrench, remove the (4) bolts from the bicycle stem faceplate. Remove the front faceplate of the stem and then insert the handlebars into the stem. Center the handlebars making sure that the thumb throttle is on the left side of the bike, and the notches on the handlebars are covered by the stem faceplate. Reattach the front plate and secure using the (4) bolts. Prior to tightening, adjust the angle of the handlebars that is preferred for the operator. Completely tighten the (4) stem faceplate bolts to 5-6 Nm. In most cases, the brake levers should be angled approximately 45 degrees downward.
3. The display screen can easily be rotated by hand for proper alignment with the operator's field of view. To tighten (if desired), use a 3mm hex wrench (not included).
4. The grips are now adjustable. Once your handlebar and controls are set to the riders' desired position, simply use a 3mm hex wrench to loosen both bolts to rotate grips forward or back. Once you have found the ideal position, re-tighten the two 3mm bolts to 2-3 Nm.



3.) Front wheel installation:

1. If present, remove the protective plastic spacer from the dropouts of the front fork.
2. Locate the front wheel. Unscrew the axle nuts and washers until they reach the end of the threads. (See photo below).
3. Remove the plastic insert from between the front brake pads. (**NOTE: DO NOT SQUEEZE** the front brake lever while the front wheel is off. Doing so will cause the brake pads and pistons to overextend and they will not retract to their original position).
4. Carefully position the front wheel in the front fork and the front brake rotor between the brake pads. Tighten the axle nut on either side of the axle equally. Torque the axle nuts to 40-45 Nm or 29.5-33.8 ft-lbs.
5. Align the front wheel with the handlebars and tighten the stem pinch bolts to 6-8 Nm.



⚠ WARNING: An improperly secured front or rear wheel can cause loss of control, accidents, serious injury, or death. Check that both wheels are properly secured during assembly before each ride.

4.) Rear Wheel Installation:

1. The rear wheel on your Ranger E-Bike will come already installed. Prior to your first ride, check the torque specifications to ensure the axle nuts are torqued down to 40-45 Nm or 29.5-33.8 ft-lbs.

5.) Pedal Installation:

1. Locate the pedals from the accessory/tool kit box. The pedals will have “L” and “R” indicators stamped on the top of the threaded section. The “L” is for the left side of the bike and is reverse threaded (counterclockwise to tighten). The “R” is for the right side of the bike and is threaded normally (clockwise to tighten).
2. Using the included 15mm wrench, tighten each of the pedals into place.



6.) Front fender & headlight installation (optional):

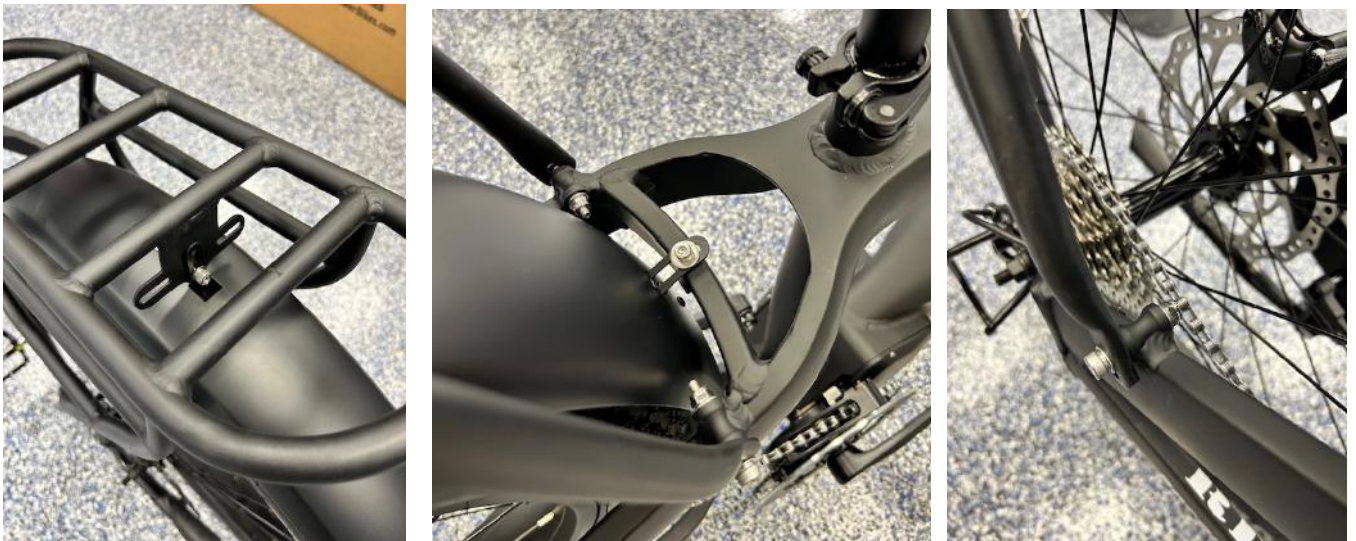
1. Attach the front fender and headlight to the front fork using (1) long bolt, (1) nut, and (2) washers from the hardware bag.
2. Locate the hole in the middle of the front fork bridge. Line up that hole with the front fender installation bridge. Place the front headlight directly in front of the front fork bridge. Install (1) long bolt and (1) washer through the holes and then add (1) washer and (1) nut behind the light. Tighten using 10mm wrench and 5mm hex wrench.

3. Plug the light into the matching red receptacle in the wire bundle. (**NOTE:** Be careful not to bend the wire prongs inside of the plugs.) *The front fender/light hardware may already be attached to the fork bridge. If so, simply uninstall the hardware and repeat steps 1-3. Be sure to reattach the bracket in the same position as it was when hardware was removed.*



7.) Rear fender & rack installation (optional):

1. Attach the rear racking using (4) medium bolts, (8) washers, and (4) nuts. Align the rack with the (4) rack tabs on the frame. Insert the bolt and washer into each of the holes and thread the washer and nut on the other side. Hand tighten. It is best to keep these loose until all (4) rack bolts and (2) fender bolts have been installed.
2. Attach the rear fender to the frame (hole is located on the bracket between the top (2) rack tabs) using the (2) smaller bolts. The thinner bolt and wide washer will be used to secure the fender to the frame. The remaining small bolt, (2) washers, and (1) nut will be used to install the fender to the rear rack. (See photos below.)
3. Once all rack bolts and fender bolts are installed, tighten them down evenly (adjusting the alignment of the rack and fender as needed).



8. Brake pad & rotor adjustment (if applicable):

If there is audible rubbing between the brake pads and the brake rotor, it may be necessary to adjust the front and rear brake caliper after installation and repeated use.

1. Loosen the top and bottom bolts of the brake caliper. **DO NOT** completely remove the bolts. Once loose, center the brake rotor between the brake pads. Tighten the top and bottom caliper bolt being careful not to move the brake caliper. Spin the tire to listen for rubbing. Make small adjustments to the caliper, as needed, to eliminate rubbing.



8.) Adjusting the seatpost:

The seat will come installed in the bike. However, that position is likely not appropriate for all riders. It may be necessary to adjust the seat height and position to ensure safe, comfortable, and efficient riding.

1. Remove the seatpost from the Ranger E-bike frame (if applicable). Once the seatpost is outside of frame, apply a small amount of grease on the seatpost to prevent seizing over time.
2. To adjust the seat height up or down, loosen the quick release lever that is securing the seat post. Adjust to the desired height of the rider then tighten the quick release lever.

▲ DANGER: Make sure you do not overextend the post. Overextending the seatpost can cause it to break or fall off your bike, which will put you at very high risk of serious injury or death. Avoid this danger by inserting your seatpost into the seat tube far enough that the minimum insertion point is no longer visible.

3. The operator may need to adjust the horizontal seat position and pitch of the seat. Under the seat, you can loosen seat adjustment bolt (using a 6mm hex wrench) and put into the proper position. Once in the ideal position, tighten to 8-10 Nm.

▲ WARNING: Make sure the bolt is secured for safe riding.

9.) Inflating the tires:

Proper tire inflation and care can help prolong the life of the tires. Check the tires and tread before every use. Check the tire pressure before every use and make sure it does not exceed the maximum pressure printed on the tire sidewall.

1. The range for tire pressures is from 10-30 psi.
 - a. 10 psi: This is the lowest pressure the tire is rated for.
 - b. 10-15 psi: This is the recommended pressure for very soft sand and snow.
 - c. 15-25 psi: This is the recommended range for most off-road riding, depending on your preferences and the specific terrain.
 - d. 25-30 psi: This is the recommended pressure for pavement or smooth, hard surfaces
 - e. Battery range may vary depending on tire pressure.

▲ WARNING: Underinflating your tires can result in loss of control. Overinflating can make the tires burst. Either scenario can lead to serious injury or death. Always maintain the correct air pressure of your tires, which is listed on the tire's side-wall, and use a regulated air source with pressure gauge so you can measure pressure accurately.

10.) Torque specifications:

Before your first ride, verify that all fasteners, nuts, and bolts are torqued to the proper specifications outlined below.

⚠ WARNING: Failure to ensure proper torque can result in bike or component failure, resulting in serious injury, death, or property damage.

Location	Component	Rec. Torque
Handlebars	Stem pinch bolts	6-8 Nm
	Stem faceplate bolts	5-6 Nm
	Brake lever clamp bolts	4-5 Nm
	Throttle clamp bolts	2-3 Nm
	Display bolts	1-2 Nm
Brake Area	Brake caliper	6-8 Nm
Seat Area	Seat adjustment bolt	8-10 Nm
	Seat post height adjustment	Securely tighten; do not over tighten
Dropout Areas	Front axle nuts	40-45 Nm
	Rear axle nuts	40-45 Nm
Frame Area	Rack bolts	6-8 Nm
Bottom	Pedals into crank arm	35 Nm
Bracket and Crank Area	Crank bolts	45 Nm

SECTION 2: BATTERY INSTALLATION, CARE, MAINTENANCE

The battery that comes with your Ranger E-Bike is a state-of-the-art, lithium-ion battery produced by LG, that's designed to give you years of power with proper care and use. Follow the recommendations here for the best possible performance.

⚠ WARNING: Charging your battery with a charger other than one supplied by RECON Power Bikes and designed for your specific bike can cause damage to your bike's electrical system or create a fire hazard. Only use a battery charger designed for your bike and supplied by RECON Power Bikes.

1. Installing and operating the battery:

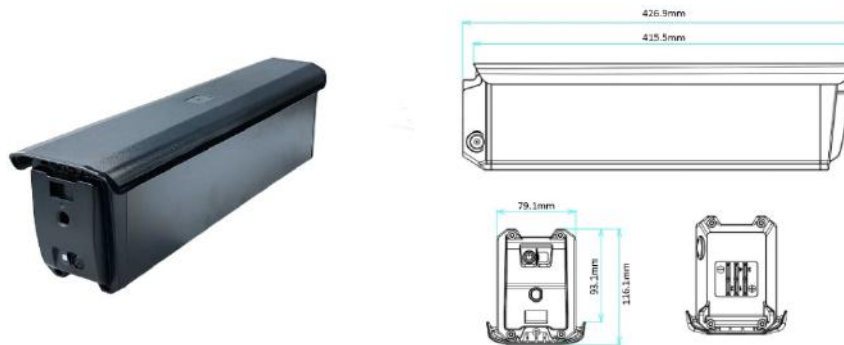
1. To install the battery, use the supplied battery key to turn the lock on the bike counterclockwise until it stops spinning. (**Note:** Do not force the key and lock as it may cause damage.)
2. Turn the handlebars completely to the left to make sure the front fender does not interfere with the installation.
3. Locate the bottom of the battery (this is the end with 6 slots for the battery contacts). Carefully insert the battery with the slotted end down towards the pedals with the protective cover facing the ground.
4. Turn the battery latch, on the bottom of the bike, to the side while inserting the battery. You should hear an audible click when the battery snaps into position. The latch will also return to its original position.
5. After the battery is installed, turn the key clockwise until it stops to secure the battery into the bike.
6. Keep your key in a safe place. It is used to remove the battery from the bike.



CERTIFICATION: Bike is certified to the ANSI/CAN/UL 2849 Standard for Safety & Electrical Systems for E-Bikes and the Battery to UL 2271 testing for batteries used in light electric vehicles (LEV).

⚠ WARNING: Using a damaged battery or charger can damage your bike and/or create a fire hazard. Stop using your battery and charger and contact RECON Power Bikes immediately if any of the following occur: (1) Your battery or charger is physically damaged, non-functional, or performing abnormally. (2) Your battery or charger experienced a significant impact from a fall or crash, with or without obvious signs of damage. (3) Your charger becomes too hot to touch (it's designed to get warm with normal use), has an abnormal odor, or shows other signs of overheating. Store the damaged battery in a safe location. As soon as possible, recycle or otherwise dispose of it according to local rules and regulations. Contact RECON Power Bikes if you have any questions or to purchase a compatible replacement battery.

⚠ DANGER: Never open the battery housing, which will void the warranty and can result in battery damage. It can also expose you to caustic substances and electrical shock or it could create a fire hazard, which can lead to serious injury or death.



2.) Charging the battery:

Charge in a safe and appropriate location. Store and use the charger in a safe place—away from children, direct sunlight, dirt, debris, tripping hazards (including electrical cords), or any materials that could ignite in the unlikely event of a charger or battery malfunction. Position the charger and battery where they're not at risk for falls or other impacts. Your battery needs to charge at room temperature or a bit cooler (50° F–77° F (10° C–25° C)). It generates heat while charging, but it's designed to air-cool; keep it uncovered and the lights facing upward on a flat, stable, hard surface.

1. Plug the output lead of the charger into the plug on the side of the battery (this can be done with the battery installed in the bike or removed from the bike). If the battery is installed in the bike, move the protective rubber charge port cover and insert the plug into the battery.
2. Plug the AC Plug into a 110v household power socket to begin charging.
3. The **RED** indicator light on the charger will illuminate when charging. It will turn **GREEN** when the battery is charged. A complete charge on a fully drained battery may take up to (6) hours.
4. After charging is complete, first unplug the charger from the wall and then from the battery charging port.

⚠ WARNING: Letting the charger's plug contact metal objects could cause a power discharge (a spark), which could injure you or create a fire hazard.

⚠ WARNING: Letting a battery charge unattended increases the risk that a charging problem will go undetected and lead to component damage or a fire hazard. Always charge your battery where you can monitor it.

3.) Battery care and maintenance:

- **NEVER LEAVE THE BATTERY STORED ON THE CHARGER, ALWAYS UNPLUG THE BATTERY AFTER IT IS FULLY CHARGED.**

- **DO NOT LEAVE A CHARGING BATTERY UNATTENDED.**
- **NEVER CHARGE A BATTERY FOR LONGER THAN 12 HOURS AT A TIME.**
- **DO NOT CHARGE THE BATTERY WITH ANY CHARGER EXCEPT THE ONE PROVIDED.**
- **ALWAYS CHARGE INDOORS, WITH DRY CONDITIONS, AND AWAY FROM DIRECT SUNLIGHT.**
- **CHECK CHARGER, CABLES, AND BATTERY FOR DAMAGE BEFORE EACH CHARGING SESSION.**
- **ONLY CHARGE YOUR BATTERY AT TEMPERATURES BETWEEN 50-80 F.**
- **KEEP CHARGER AND BATTERY AWAY FROM LIQUIDS AND METAL OBJECTS.**
- **KEEP THE CHARGER IN A SAFE PLACE AND AWAY FROM CHILDREN.**
- **WHEN IN USE, THE CHARGER SHOULD NOT BE COVERED AS TO PREVENT DAMAGE CAUSED BY OVERHEATING OR FIRES.**
- **IF YOU NOTICE A SMELL COMING FROM THE CHARGER, OR IT IS TOO HOT, STOP CHARGING IMMEDIATELY AND CONTACT RECON.**

4.) Tips for maintaining battery:

- The battery pack may be charged after each use. The 48V lithium-ion battery has no memory effect, so you can charge the battery after short periods of use without any damage.
- The battery may be recharged on or off the bike.
- Remove the battery from the bike by turning the key counterclockwise and toggling the battery latch on the underside of the bike.
- The safe charging unit and internal Battery Management System will automatically stop charging when the battery is full.
- **DO NOT** ever attempt to disassemble or repair the internal parts of your battery as this will void your warranty and can result in personal injury.
- **DO NOT** wash the battery shell with organic solvent.
- **DO NOT** submerge the battery pack in water. It can get wet in the rain or when washing, but do not submerge.
- Avoid dropping below 5% battery power. This can shorten the lifespan of the battery.
- The battery will perform best between 32-122° F for discharging.
- Room temperature is the best for charging.
- **Long Term Storage** – if the battery will not be used for an extended period (greater than (2) weeks)
 - For storage longer than (2) weeks, the battery should be kept between 50-75% capacity, powered off, and stored in a dry place between 50-75° F.
 - The battery should be checked every (2) weeks and charged, if needed, to 50-75%.

5.) Transportation:

- Keep out of the direct sunlight and rain when transporting.
- When transporting your bike, remove the battery and take inside the vehicle.
- Always keep dry, well ventilated, and out of direct sunlight.
- Protect the battery from drops and impacts.
- **DO NOT** place under heavy objects.
- **DO NOT** transport or store near flammable, explosive, or sharp objects.
- Batteries cannot be transported via airplane.

6.) Storage:

- **DO NOT** store a fully charged battery or leave it plugged into the charger for long periods of time.
- Store at a 50-75% charge level.
- **DO NOT** leave the battery stored on the ground or concrete.
- For maximum battery life, discharge and recharge is recommended every 2-3 months.
- Deep cycling is not necessary for lithium-ion batteries and can reduce the life of the cells.
- If in storage, recharge your batteries to 100% when ready to use and leave on the charger for an additional 30 minutes to 1 hour to ensure proper cell balance.

- **DO NOT** store the battery in temperatures exceeding 104 degrees F. They can be stored in cooler environments down to 32° F, but must be warmed up to room temperature before charging.
- **DO NOT** charge the battery when freezing! Attempting to charge a frozen battery can cause irreversible damage.

SECTION 3: BIKE OPERATION, RIDING TIPS, AND SAFETY

1. How to turn the bike on:

1. After the battery has been charged and has been properly installed into the bike. Push and hold the POWER (⏻) button above the “+” and “-“ buttons on the left side of your handlebar. The display screen will turn on and light up.



2. Display screen and controls:

1. The display screen will show you:
 - a. Current Time (top left of screen)
 - b. Battery Level (top right)
 - c. Current Speed and Wattage Output (center)
 - d. Trip Counter (bottom left)
 - e. Odometer (bottom right)
 - f. Pedal Assist Level (PAS) (bottom center)



2. To adjust the Pedal Assist Level (PAS), push the “-“ button to DECREASE PAS level and push the “+“ button to INCREASE PAS level.
3. RECON always recommends starting in PAS Levels 1 or 2 until the operator is comfortable with the bike before increasing to higher levels of motor output.
To turn on the HEADLIGHT, push and hold the “light” button. To turn off the headlight, push and hold the “light” button again.
4. To engage WALK MODE, push and hold the “-“ button while standing next to the bike. The bike will begin to move slowly. To deactivate walk mode, engage either brake lever or depress the “-“ button.

⚠ CAUTION: Be aware of obstacles while operating walk mode. Understand how to turn off walk mode: pull either brake lever or depress the “-“ button.

3. Tips for riding the Ranger E-Bike:

1. To maximize range and battery output, use the pedals and pedal assist (PAS) often (especially during start-ups and hill climbs).
2. On steep inclines, it is best to shift the gears down and the PAS level up to pedal up a hill.
3. **DO NOT** push the throttle too suddenly. The bike should accelerate slowly, reducing battery consumption and risking damage to the electrical system and gearing. It is best to use the pedals to avoid sudden stops and starts.
4. The bike's internal controller has a charge overload protection system. If the bike is overloaded or the battery is too hot, the power will be cut off automatically and restored when it is normal and safe to ride.
5. Avoid using the throttle when braking.
6. To immediately cut power from the motors, stop pedaling, and engage whichever brake lever is safest. Engaging the brake levers cuts power from the motors.

4. Safety: ⚠️ **WARNING** ⚠️ **DANGER**

1. Know and understand your limitations and the limitations of the E-Bike by practicing braking, using the throttle and pedal assist system in a controlled location and environment.
2. It is the operator's responsibility to know and follow all applicable local, state, and federal regulations.
3. **This bike is to be used solely by ADULTS over the age of 18.**
4. **Alcohol, Drugs, other Substances**
 - a. ⚠️ **DANGER:** **NEVER** ride this bike under the influence of alcohol, drugs, or any substance/condition that could impair your motor function, judgement, reaction time, or ability to safely operate this bike. Doing so puts you at a VERY HIGH RISK of serious injury or death.
5. **Extreme Riding**
 - a. ⚠️ **DANGER:** **Extreme riding puts you at a VERY HIGH RISK of serious injury or death.** Extreme riding includes but is not limited to jumps, stunts, or any riding that exceeds your capabilities or the strength and integrity limitations of certain bike components and/or otherwise leads to dangerous situations. Never engage in extreme riding or any type of riding that exceeds your capabilities.
6. **Helmets**
 - a. ⚠️ **DANGER:** Riding any bike without a helmet puts you at VERY HIGH RISK of serious head injury or death. Always wear a properly fitted helmet that covers the forehead. Many locations require specific safety devices. It is your responsibility to familiarize yourself and comply with the laws, rules, and regulations where you ride.
7. **Wet and low visibility conditions**
 - a. ⚠️ **WARNING:** Riding in wet conditions means slippery hands, feet, and riding surfaces, which greatly increases your risk of accidents, serious injury, or death. Low-visibility conditions (night, dusk, dawn, fog, mist, rain, snow, etc.) will compound your risk of injury or death. If you must ride in wet conditions, following the guidelines below can help mitigate risk.
 - b. ⚠️ **WARNING:** Riding at night or in other low-visibility conditions (dawn, dusk, fog, rain, mist, snow, etc.) makes it harder to see and avoid hazards and makes it harder for others to see and avoid you, which increases risk of accidents, serious injury, or death. Wet, slippery surfaces will compound your risk of injury or death. Avoid these conditions whenever possible. If you must ride in these conditions, following the guidelines below can reduce risk.

SECTION 4: MAINTENANCE AND INSPECTION CHECKLISTS

You should follow the maintenance guidelines below and see a certified bike shop seasonally to ensure your bike is properly maintained and safe to use. Doing this will prolong the lifespan of the bike and its' components.

⚠ WARNING: A bike that has not been properly maintained or checked before rides can increase the risk of serious injury, death, or property damage. If there are issues during your inspections, do not ride the bike. Consult a certified, reputable bike mechanic or contact RECON Power Bikes for support.

1.) Before your first ride:

- Turn the handlebars completely to the left and right to make sure there is no cable interference that may cause cables to come unplugged.
- Make sure pedals are securely tightened using recommended torque specs.
- Check for brake functionality.
- Adjust seat height and secure properly.
- Make sure handlebars are secure and handlebar stem is tightened to proper torque specs.

2.) Before every ride (or intervals of 20-30 miles):

- Check tire pressure and tread wear. Inspect tires and sidewalls for damage.
- Check the brakes, making sure that brakes have adequate power and sufficient brake pad remaining.
- Ensure the wheels are straight and turning freely. Ensure spokes are consistently and equally tight.
- Check the chain tension and lubricate the chain to reduce friction and to increase shifting precision and efficiency.
- Ensure that the handlebars and stem are secured to the proper torque specs.
- Ensure that the battery is charged and free of damage.

3.) After every ride:

- Remove as much dirt and debris from the bike as possible.
- If the bike is wet, remove as much water/liquid as possible to keep dry.
- Store your bike and battery in a dry, temperature-controlled location between 50-77° F.
- Charge your battery in a temperature-controlled location between 50-77° F.

4.) Monthly Maintenance:

- Check the frame for damage by identifying any dents, cracks, or chips to the frame.

⚠ WARNING: Do not ride your bike if you have any cracks on the frame. This can lead to frame failure, increasing the risk of serious injury, death, or property damage.

- Clean and lubricate drivetrain and chain.
- Check cassette and derailleur for wear/damage.
- Check brake pads for wear. Replace if needed (brake pad material will be thinner than the backing).

⚠ WARNING: Worn brake pads may significantly affect your ability to stop. This can increase the risk of serious injury, death, or property damage.

5.) Cleaning Tips:

- **DO NOT** wash the bike with high-pressure jets. This will prevent water infiltration into the electrical system and battery.
- Dirt on painted surfaces should be removed with a neutral cleaning product. Then wiped with a dry cloth.
- Lubricate the bike's chain and mechanical parts after each wash.
- **DO NOT** apply lubricants on the brake rotors, brake pads, brake levers, tires, rims, battery, or controller.

SECTION 5: WARRANTY INFORMATION

Every E-Bike from RECON comes with a lifetime limited warranty against manufacturing defects in materials or workmanship on its frame. An 18-month limited warranty on the motor and display. And a limited 12-month warranty on the battery. This warranty applies only to the original registered owner of the E-Bike from RECON and is not transferable. This limited warranty does not apply to normal wear and tear, malfunctions, or failures due to abuse, neglect, improper repair, improper maintenance, alteration, modifications, accidents, or other improper uses. The one-year warranty on RECON lithium-ion batteries from the date of original purchase does not include damage from power surges, use of improper charge, improper maintenance, normal wear, water damage, or other misuse.

If a component is deemed to be defective or damaged without user error or other improper use, RECON will assist in replacing that part. This includes any parts deemed to have been damaged in shipping. We will not replace any part deemed to be damaged by the user.

In the case of a repair or parts replacement under warranty, we will work with the owner to find a local certified bicycle repair shop to make the necessary fix. RECON will also cover the associated repair labor fees, only if the scope of service is agreed upon prior to the fix. The owner may also return the unit to RECON to make the needed repairs but will be responsible for shipping costs each way.

WARRANTY CLAIMS:

All warranty claims must be made through RECON. Proof of the original purchase is required with any warranty request. Before making a claim, please contact our service department at 888-485-2589 or by email at info@reconpowerbikes.com, as there may be a simple fix for the problem. Valid warranty claims will be processed within one year of the initial purchase.

SECTION 6: SHIPPING DAMAGE CLAIMS

Upon delivery, immediately inspect your products for damage. Freight damage claims are extremely time sensitive, and we will not accept freight damage claims later than 3 business days from delivery. Note any damage to your products on the Bill of Lading before you and the delivery driver sign-off on the shipment. Take photos of any damage that is found and date the images when possible. Report shipping damage claims within 3 business days of delivery to RECON at 888-485-2589 or info@reconpowerbikes.com

SECTION 7: RETURN POLICY

RECON will accept the return or cancellation of an order under the following conditions:

- Must have less than 10 miles on the odometer.
- Must be in like new condition and free from dirt, dust, or fragrances.
- Must be in the same packaging and condition that you received it (cardboard, foam, etc.)
- Must include all items that were included inside the box (charger, keys, hardware, etc.)

ADDITIONAL POLICIES:

- Items that are purchased and cancelled before shipping are subject to a 15% processing fee.
- The original shipping charges are non-refundable.
- RECON will not accept the returns of products after 14 days.

In the event of a product return, RECON will not accept the return of promotional items associated with that sale. The MSRP value of the promotional items will be deducted from the refund.

Before a return is made, the customer must receive written approval of the return and a Return Authorization Number from RECON. If a customer sends a return without the written consent of the company, a refund will not be issued. The customer who sends a unit back without consent will be responsible for shipping costs back to them or will sacrifice the item. Once a return is approved by RECON, you may receive an exchange, company credit or a refund.

All purchases made through authorized RECON dealers are subject to the dealer's return and refund policies. RECON does not accept direct returns of products sold through authorized dealers. All products sold through dealers must be returned to the original seller.

Please address your return to:

RECON Power Bikes

c/o Return Authorization # _____

327 Ley Road

Fort Wayne, IN 46825

SECTION 8: ERROR CODES AND TROUBLESHOOTING

Error Code	Description	Troubleshooting Steps
04	Throttle Position Fault	Check if throttle has returned to home position.
05	Throttle Fault	Check the throttle connections.
06	Low Voltage Protection	Check the battery connections and charge state.
07	High Voltage Protection	Check the battery connections and charge state.
08	Hall Sensor Malfunction	Contact RECON Customer Service.
09	Motor Phase Cable Fault	Check the motor module.
10	High Motor Temp	Stop Riding, turn the motor off and allow to cool. If problem persists, contact RECON Customer Service.
11	Motor Temp Sensor Fault	Contact RECON Customer Service.
12	Current Sensor Fault	Check the controller.
13	Battery Temp	Turn off the bike, remove the battery and ensure proper connections. Allow the battery to cool. If problem persists, contact RECON Customer Service.
14	High Controller Temp	Turn off the bike, remove the battery. Allow the controller(s) to cool. If problem persists, contact RECON Customer Service.
15	Controller Temp Sensor Fault	Check the Controller.
21	Speed Sensor Fault	Check the position of the speed sensor.
22	BMS Communication Fault	Remove the battery. Contact RECON Customer Service.
30	Communication Fault	Check the controller connections. Contact RECON Customer Service.