
Ariel Rider X-Class 60V User Manual



Welcome to Ariel Rider!

Thank you for choosing Ariel Rider for your electric journey. We're thrilled to have you join our community of riders who embrace the perfect blend of adventure, innovation, and style. At Ariel Rider, we are dedicated to crafting high-performance ebikes that empower you to explore new horizons, navigate your daily commute, or simply enjoy the thrill of the ride.

Every Ariel Rider bike is designed with precision, reliability, and your safety in mind. Our mission is to create an exceptional riding experience that combines cutting-edge technology with rugged durability, ensuring your bike meets and exceeds your expectations.

As you begin this exciting journey with your new Ariel Rider X-Class, we encourage you to explore all the features and capabilities of your ebike. Please take a moment to read through this manual carefully—it's packed with everything you need to enjoy your bike safely and efficiently.

Welcome to the Ariel Rider family! If you have any questions or need assistance, don't hesitate to reach out to our support team. We're here to ensure your adventure is nothing short of extraordinary.

Let's ride together!

— The Ariel Rider Team

Join the Ariel Rider Community!

Your adventure with Ariel Rider doesn't end with your bike — it's just the beginning. Connect with a vibrant community of passionate riders who share your love for exploring the world on two wheels.

Follow us on social media to stay updated on the latest product news, riding tips, and exclusive events. Share your experiences, ask questions, and inspire others with your journeys. Don't forget to tag us in your photos and videos—we love seeing where your Ariel Rider takes you!

- Instagram: [@ArielRider](https://www.instagram.com/ArielRider)
- Facebook: [/groups/arielriderowners/](https://www.facebook.com/groups/arielriderowners/)
- YouTube: [Ariel Rider Official Channel](https://www.youtube.com/ArielRiderOfficialChannel)

Be part of something bigger. Share your feedback, learn from fellow riders, and discover new adventures waiting for you. Welcome to the Ariel Rider family—we're excited to see where the road (or trail!) takes you!



Tag us with #ArielRider for a chance to be featured!

Contact Ariel Rider Customer Support

We're here to help! If you have any questions, need assistance, or require support with your Ariel Rider bike, feel free to reach out to our dedicated customer support team:

- Email: info@arielrider.com
- Phone: +1 (800) 573-1840
(Available Monday to Friday, 9:00 AM – 5:00 PM PST)
- Website: ArielRider.com

Visit our website for FAQs, troubleshooting guides, and instructional videos.

We're committed to providing exceptional service and ensuring that your Ariel Rider experience is as smooth and enjoyable as your ride. Let's get you back on the road!

Be sure to retain this manual as your convenient X-Class 60V information source.



This manual contains many warnings and cautions concerning the safe operation and consequences if proper setup, operation, and maintenance are not performed. All information in this manual should be carefully reviewed and if you have any questions you should contact Ariel Rider immediately. The notes, warnings, and cautions contained within the manual and marked by the triangular Caution Symbol at the right of this page should also be given special care. Users should also pay special attention to information marked in this manual beginning with this exclamation point.

NOTICE



Due to the inherent variability of riding conditions and situations, this manual cannot account for every possible scenario or condition that may arise while using the Ariel Rider X-Class. Riders must understand that there are risks associated with the use of any ebike, including risks that cannot be predicted, mitigated, or avoided, which are the sole responsibility of the rider.

Please retain this manual, along with any other documents provided with your motorbike, for future reference. However, all content in this manual is subject to change or withdrawal without prior notice. While Ariel Rider makes every effort to ensure the accuracy of its documentation, it assumes no responsibility or liability for errors, omissions, or inaccuracies.

Assembly and the initial adjustment of your Ariel Rider motorbike require specialized tools and skills. It is strongly recommended that these tasks be performed by a certified and reputable bike mechanic to ensure safe operation and compliance with warranty terms. Under no circumstances shall Ariel Rider be liable for any direct, indirect, punitive, incidental, or special consequential damages, including but not limited to:

- Property damage
- Physical or mental injury
- Loss of income or monetary damages
- Injury to third parties

These limitations apply regardless of whether such damages arise from the use, misuse, or inability to use Ariel Rider products. Ariel Rider makes no claims, representations, or warranties, whether express or implied, regarding the safety, reliability, durability, or performance of its products, including but not limited to implied warranties of merchantability, fitness for a particular purpose, or non-infringement of third-party rights. Ariel Rider further disclaims liability for issues related to third-party contractors, repairs, or unauthorized modifications to its products.

By purchasing, using, or allowing the use of Ariel Rider products, you acknowledge and agree that the use of ebikes carries inherent risks. YOU EXPRESSLY AND VOLUNTARILY ASSUME ALL RISKS, INCLUDING THE RISK OF DEATH OR PERSONAL INJURY, ASSOCIATED WITH USING ARIEL RIDER PRODUCTS, WHETHER OR NOT SUCH RISKS RESULT FROM THE NEGLIGENCE OR OTHER FAULT OF ARIEL RIDER, AS DETERMINED BY A COURT OF COMPETENT JURISDICTION.

Your use of the Ariel Rider product is entirely at your own risk, and you waive any and all claims against Ariel Rider for damages or injuries arising from its use.

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1. Introduction and General Information

Product Overview

The Ariel Rider X-Class: A Bold Redesign of a Proven Icon

Since its debut in 2020, the Ariel Rider X-Class has been a symbol of power, performance, and versatility in the ebike market. Now, with its first complete redesign, the X-Class is better than ever, setting a new benchmark for innovation and style.

This reimagined ebike combines its proven rugged design with state-of-the-art upgrades to enhance both performance and rider experience. The powerful motor delivers exhilarating acceleration and top speeds, while the extended battery range ensures you can ride further than ever before. A revamped dual-suspension system (if applicable) offers unmatched comfort and control, even on the toughest terrains.

The redesigned X-Class features a durable new frame, premium components, and a fresh aesthetic that reflects its bold personality. With an upgraded LCD display, enhanced integrated lighting, and improved pedal-assist functionality, the X-Class offers greater customization and control to suit every rider's needs.

Building on its legacy, the 2025 Ariel Rider X-Class is more than just an ebike—it's a statement of uncompromising performance and design. Whether you're an existing fan or a new rider, this groundbreaking redesign ensures the X-Class continues to redefine what's possible in ebikes.

Intended Use and Weight Limitations

The Ariel Rider X-Class is designed as a high-performance ebike intended for urban commuting, recreational riding, and light off-road use. It is built to handle paved roads, gravel paths, and moderate trails, offering a versatile riding experience for a wide range of terrains. However, it is not suitable for extreme off-road conditions, competitive racing, or stunt riding.

To ensure safety and optimal performance, the X-Class has a maximum rider weight limit of 350 lbs (160 kg), which includes the rider and any cargo. Exceeding this weight limit may compromise the bike's performance, durability, and safety. Riders are advised to adhere to this limitation and avoid overloading the bike with excessive cargo.

For the best experience, always use the X-Class within its intended purpose and operating conditions. Misuse, such as riding on stairs, performing stunts, or exposing the bike to extreme environments, may lead to damage or injury and void the warranty.



You **MUST** hold onto the bike at all times when loading cargo and/or a passenger. The kickstand is not designed to support the bike during the loading process and should not be relied upon for stability. Do not assume the bike is balanced or secure when using the kickstand. Always maintain physical control of the bike to prevent tipping or instability while cargo is being loaded, secured, or attached. Failure to follow these instructions can result in injuries or damages. Ariel Rider shall not be held responsible for any injuries, damages, or losses arising from cargo being loaded, secured, or attached to an Ariel Rider motorbike. Prioritize safety by properly handling and securing your cargo or passenger.

Legal and Safety Disclaimers

Responsibility for Compliance with Local ebike and ebike Laws

It is the rider's sole responsibility to ensure compliance with all local, state, and national laws governing the operation of ebikes. Regulations regarding speed limits, motor power, age restrictions, licensing, registration, and permitted riding areas vary by jurisdiction. Riders must familiarize themselves with and adhere to these laws to ensure safe and legal operation.

Failure to comply with local regulations may result in fines, penalties, or restrictions on use. Ariel Rider is not liable for any legal or regulatory infractions resulting from the improper or unauthorized use of the X-Class. Riders are encouraged to consult their local transportation or motor vehicle authorities for specific guidelines and restrictions applicable to their area.

By purchasing and operating the Ariel Rider X-Class, the rider assumes full responsibility for the lawful use of the motorbike/ebike.



The replacement of original components or the installation of third-party accessories, including accessories from Ariel Rider that are not explicitly recommended for your bike model, is entirely at your own risk. Using aftermarket components or accessories that have not been tested or approved by Ariel Rider for safety and compatibility may void your warranty, compromise the safety and integrity of your motorbike, and potentially lead to serious damage, unsafe riding conditions, injury, or even death.



Ariel Rider assumes no responsibility or liability for any injuries, damages, or losses resulting from the use of non-original components, unauthorized spare parts, or unapproved accessories. To ensure your safety and maintain the performance and reliability of your Ariel Rider motorbike, always use components and accessories specifically designed and tested for your model.

2. Safety Guidelines

Personal and Road Safety

Helmet and Reflective Gear Recommendations

For your safety, it is **REQUIRED** that all riders wear a properly fitted, certified helmet whenever operating the Ariel Rider X-Class. Helmets should meet safety standards such as CPSC, ASTM, DOT, or equivalent certifications, as they can significantly reduce the risk of serious head injuries in the event of an accident.



Some states, such as California, may require DOT-approved helmets for every rider. It is the rider's responsibility to review and comply with local helmet laws and requirements. Ariel Rider is not liable for any fines, penalties, or injuries resulting from non-compliance with helmet regulations. Always ensure your helmet meets the applicable standards in your area and is secured correctly before riding.

In addition to a helmet, wearing reflective gear is highly recommended, especially during low-light conditions or nighttime riding. Reflective vests, armbands, and strips on clothing, backpacks, or the bike itself can enhance your visibility to other road users, reducing the risk of collisions.

Proper safety gear, including closed-toe shoes and protective clothing, is essential for safe riding. Always prioritize your safety by being prepared and visible on the road.

Riding Tips for Safe Operation

To ensure a safe and enjoyable ride on your Ariel Rider X-Class, always stay focused and alert while on the road. Avoid using distractions such as headphones, earbuds, or phones while riding, as they can impair your ability to hear approaching vehicles or respond to sudden changes in your environment.

Maintain a safe speed that is appropriate for the terrain and traffic conditions, and always keep both hands on the handlebars for maximum control. Be cautious at intersections and around pedestrians, using hand signals to indicate turns or stops.

Regularly check your surroundings and anticipate potential hazards such as potholes, gravel, or opening car doors. When riding in wet or slippery conditions, reduce your speed and increase your braking distance to maintain control.

By staying attentive and minimizing distractions, you can help ensure a safer experience for yourself and those around you. Always prioritize safety while enjoying the thrill of the ride.

Electrical Safety

Proper Handling of Batteries and Chargers

To ensure the safety and longevity of your Ariel Rider X-Class battery and charger, it is crucial to handle them with care and follow these guidelines:

1. Charging Environment:

Always charge the battery in a dry, well-ventilated area, away from direct sunlight, extreme temperatures, or flammable materials. Avoid charging the battery in wet or humid conditions to prevent the risk of electrical shock or damage.

2. Connection and Alignment:

When connecting the charger to the battery, ensure that the connectors are properly aligned to avoid damaging the ports. Never force connections or use incompatible chargers.

3. Avoid Overcharging:

Disconnect the charger once the battery is fully charged. Overcharging can reduce the battery's lifespan and increase the risk of overheating.

4. Storage:

Store the battery in a cool, dry place, ideally between 50°F and 77°F (10°C to 25°C). If storing the battery for an extended period, charge it to approximately 50% and check the charge level every three months.

5. Damage Prevention:

Do not drop, puncture, or expose the battery to physical damage. A damaged battery can pose serious safety risks, including fire or leakage. If the battery or charger shows signs of damage (e.g., cracks, swelling, or burnt odor), discontinue use immediately and contact customer support.

6. Safety Precautions:

Never leave the battery unattended while charging, and avoid using extension cords or power strips that may not support the charger's voltage requirements. Always use the original charger provided with your X-Class for safe and optimal performance.

By following these handling practices, you can maximize the performance and lifespan of your battery and charger while ensuring your safety and that of others.

Warnings Against Tampering with Electrical Components



Tampering with or modifying the electrical components of the Ariel Rider X-Class, including the motor, battery, BMS (Battery Management System), or wiring, is strictly prohibited. Unauthorized alterations can compromise the safety, performance, and reliability of the motorbike and may lead to severe consequences, such as electrical failures, fire hazards, or personal injury.

Any modification to the electrical system, such as bypassing safety features, altering voltage limits, or attempting to increase motor output, voids the warranty and violates safety standards. These actions can result in overheating, damage to critical components, or even catastrophic failure during operation.

If you experience any issues with the electrical components, contact Ariel Rider's customer support or an authorized technician for assistance. Do not attempt repairs or modifications yourself unless explicitly instructed in this manual.

By adhering to these warnings, you help ensure your safety, protect your motorbike, and maintain compliance with warranty and regulatory requirements. Tampering with electrical components is dangerous and can result in serious injury or property damage. Always prioritize safety and rely on professional support for any technical issues.

Brake and Suspension Safety

To ensure safe and reliable operation of your Ariel Rider X-Class, it is essential to regularly inspect and maintain both the brakes and suspension system. Proper care of these critical components enhances performance and reduces the risk of accidents.

Brake Safety

1. Inspection:

- Check the brake levers for smooth operation and ensure they return to their resting position after use.
- Inspect brake pads for wear; replace them if they are worn down to the manufacturer's minimum thickness recommendation.
- Examine brake rotors for warping, cracks, or uneven wear. Replace damaged rotors immediately.
- Ensure hydraulic brake fluid levels (if applicable) are adequate, and there are no signs of leaks.

2. Adjustment:

- Align brake pads to make full and even contact with the rotor during braking.
- Adjust brake cable tension (for mechanical brakes) or bleed hydraulic brakes as needed to maintain proper stopping power.
- Test brakes before each ride to ensure they provide consistent and reliable stopping force.

Suspension Safety

1. Inspection:

- Check the front and rear suspension for visible damage, such as cracks, leaks, or loose components.
- Inspect the fork stanchions and rear shock for dirt or debris buildup that may hinder performance.
- Measure sag (the amount of suspension travel when the bike is under load) to ensure it matches your weight and riding style.

2. Adjustment:

- Adjust the suspension preload, compression, and rebound damping to suit your terrain and riding preferences. Refer to the manual for recommended settings.
- Use a torque wrench to ensure all bolts and fasteners on the suspension components are tightened to the specified torque values.
- After making adjustments, perform a test ride in a safe area to confirm the suspension is functioning correctly.

General Safety Tips

- Always perform a pre-ride safety check of the brakes and suspension to identify potential issues before riding.
- Replace worn or damaged parts promptly to avoid compromising safety.
- If you are unsure how to perform maintenance or adjustments, consult a certified technician or refer to the instructional resources provided by Ariel Rider.

By maintaining your brakes and suspension regularly, you ensure a smooth and controlled ride while minimizing the risk of accidents. Prioritize safety by addressing any issues immediately and keeping your motorbike in peak condition.

3. What's in the Box

- List of included components (bike frame, battery, charger, tools, etc.).
 - Bike
 - Front Wheel
 - Front Fender
 - Charger
 - User Manual
 - Headlight
 - Tool Kit
 - Pedals
 - Keys
-

4. Assembly Instructions

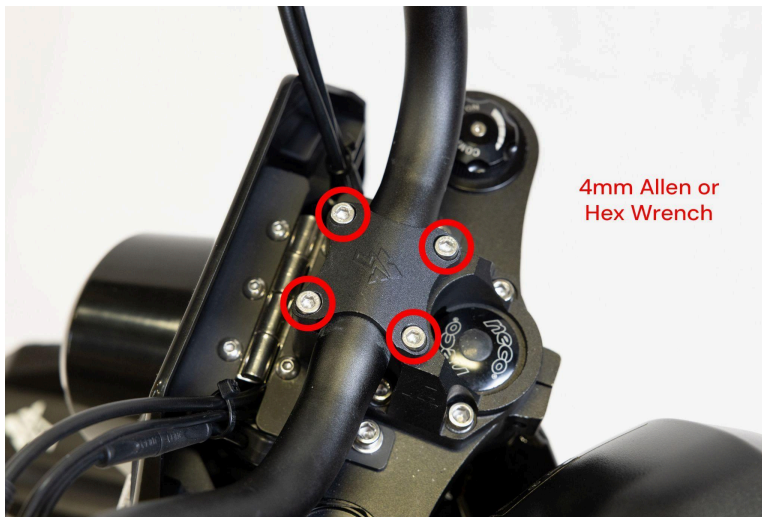
Step-by-Step Guide



NOTICE: The following assembly steps are only a general guide to assist in the assembly of your bike from Ariel Rider and is not a complete or comprehensive manual of all aspects of assembly, maintenance, and repair. We recommend you consult a certified, reputable bike mechanic to assist in the assembly, repair, and maintenance of your bike.

1. Handlebar Assembly

- Align and secure handlebars using the provided tools.



2. Wheel Installation

Align the disc rotor and secure the wheel using axle bolts.

Performance Edition:



NOTE: Before tightening the front axle on the Performance Edition, all 4 pinch bolts must be loosened so that the axle can move freely. After the axle bolts (5mm wrench) are tightened, proceed with tightening the 4 pinch bolts (4mm wrench). Failure to follow these instructions can result in an improperly tightened axle, poor handling, increased brake wear, and premature axle, bearing, or dropout failure.

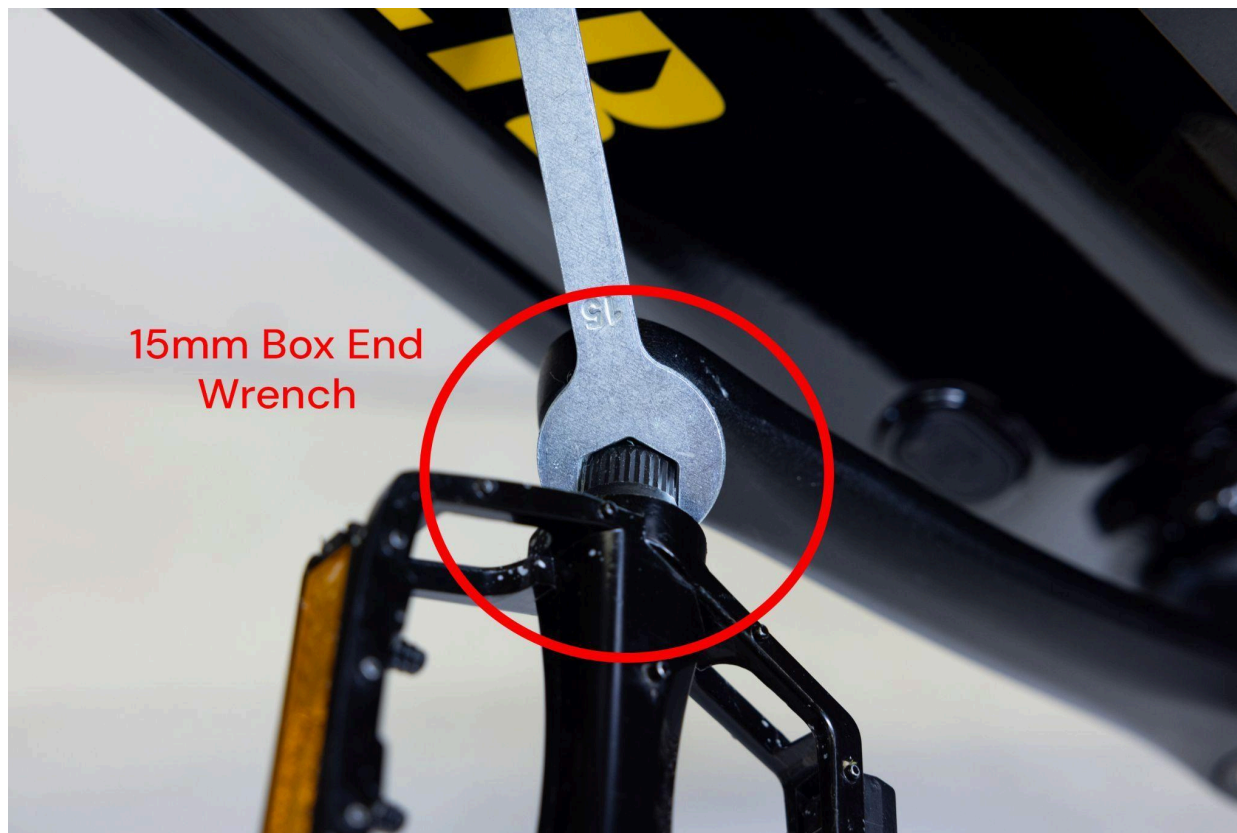
Comfort and Off-Road Editions:



For models that do not have pinch bolts: Use a 5mm Hex Wrench to tighten the axle bolts to 12NM

3. Pedal Installation

Correct orientation for left and right pedals.



4. Torque Specifications

Hardware Location	Hardware	Recommended Torque Value
Handlebar Area	Handlebar Stem Clamp Bolts	8NM
Handlebar Area	Stem Faceplate Bolts	8NM
Handlebar Area	Brake Lever Clamp Bolt	5NM
Handlebar Area	Shifter Clamp Screw	5NM
Handlebar Area	Stem Angle Adjust	Not used
Brakes	Caliper Adapter to Frame	10 NM
Brakes	Caliper to Adapter	10NM
Brakes	Brake Cable to Caliper Clamp	10NM
Brakes	Disc Brake Rotor to Hub	6NM
Seat Post Area	Seat Adjustment Bolt	12NM
Front Dropout Area	Front Axle Bolts	12NM
Front Dropout Area	Front Axle Pinch Bolts	8NM
Rear Dropout Area	Rear Axle Nuts	55NM
Rear Dropout Area	Rear Torque Arm Bolt	If applicable 10 NM

Hardware Location	Hardware	Recommended Torque Value
Rear Dropout Area	Derailleur Hanger Mounting Bolt	8NM
Rear Dropout Area	Derailleur Mounting Bolt	8NM
Rear Dropout Area	Derailleur Cable Pinch Bolt	8NM
Rear Dropout Area	Kickstand Mounting Bolts	12NM
Bottom Bracket and Crank Area	Bottom Bracket and Lockring	35NM
Bottom Bracket and Crank Area	Crank Arm Bolt into Bottom Bracket Spindle	25NM
Bottom Bracket and Crank Area	Pedal into Crank Arm	15NM
Bottom Bracket and Crank Area	Chainring Bolts	10NM
Seat Area	Controller Mounting Bolts	5NM
Fender Mounts	All	5NM



Do not extend any components including the stem beyond the minimum insertion markings on the maximum angle markings on the stem which are etched into the components. Ensure that all hardware is properly tightened (to the recommended torque values included in this manual) and components are secured before moving on to next step otherwise damage to the bike, property, serious injury, or death could occur. Ariel Rider shall not be responsible for any and all injuries or damages resulting from hardware not being tightened correctly or components that are not properly assembled.

Testing After Assembly: Checklist to Ensure Proper Assembly and Safety



Before using the bike, always check to ensure all latches, levers, and quick releases are properly secured and undamaged. Check that they are correctly secured before every ride and after every time the bike is left unsupervised, even for a short time. Otherwise, the handlebar stem and/or seat post may come loose and can result in loss of control, damage to the bike, or property, serious injury, and/or death. Ariel Rider shall not be responsible for any and all damages resulting from any latches, levers, and quick releases not being properly secured or that are damaged.

After assembling your Ariel Rider X-Class, it is crucial to perform a thorough inspection and functional test to ensure that all components are correctly installed and operating safely. Use the following checklist before your first ride:

1. General Assembly

- Confirm that all screws, bolts, and fasteners are tightened to the specified torque values, particularly on critical components such as the handlebars, wheels, pedals, and suspension.
- Verify that the bike frame and all parts are securely connected, with no visible gaps, loose fittings, or misalignments.

2. Handlebar and Steering

- Ensure the handlebars are properly aligned with the front wheel and securely tightened.
- Check that the handlebar grips are firmly attached and do not rotate during use.
- Turn the handlebars fully in both directions to ensure smooth movement and that no cables are pulled or pinched.

3. Wheels and Tires

- Confirm that both wheels are securely fastened, with axle nuts or quick-release mechanisms tightened appropriately.
- Inspect tires for correct inflation to the recommended PSI, free of punctures, cracks, or deformations.
- Spin both wheels to ensure they rotate freely without wobbling or contacting brake pads or other components.

4. Brakes

- Squeeze the brake levers to check for firm and responsive braking. The levers should not touch the handlebars when fully engaged.
- Verify that the brake pads make proper contact with the rotor, ensuring even pressure and no rubbing when the brakes are released.
- Test the braking system by walking the bike forward and applying each brake individually.

5. Pedals and Crankset

- Confirm that the pedals are installed on the correct sides (marked "L" for left and "R" for right) and are securely threaded into the crank arms.
- Rotate the pedals and crankset to ensure smooth operation without excessive resistance or unusual noises.

6. Battery and Electrical System

- Check that the battery is properly seated and locked into place with the key removed.
- Power on the bike and verify that the display lights up and all functions (speed, battery level, assist levels) are operational.
- Test the throttle and pedal-assist modes in a safe, stationary environment to ensure they function as expected.
- Inspect all cables and connectors to confirm they are securely fastened and free of damage or wear.

7. Suspension

- Bounce the bike gently to ensure the suspension responds smoothly and without unusual noises.
- Verify that all suspension adjustments (preload, compression, rebound) are properly set and bolts are tightened.

8. Lights and Accessories

- Turn on the headlight and taillight to confirm they are functioning correctly.
- Test the brake light by engaging the brakes.
- If applicable, test the adjustability features (e.g., preload, compression, rebound) to ensure they operate smoothly and hold the set position.
- Ensure all additional accessories, such as a kickstand or fenders, are securely attached and functional.

9. Shocks (If applicable)

- Check for visible damage, such as cracks, dents, or deformation on the shock body.
- Inspect for signs of oil leaks, which indicate internal damage or wear.
- Ensure the mounting points and bolts are secure and free from rust or looseness.

10. Final Test Ride

- Perform a slow test ride in a controlled environment, checking the overall handling, braking, and motor responsiveness.
- Listen for unusual sounds and feel for any instability, addressing any issues immediately.

This checklist ensures that your Ariel Rider X-Class is assembled correctly and safe for use. If you identify any issues during testing, stop riding immediately and make necessary adjustments or consult a professional technician. Prioritize safety to enjoy a smooth and worry-free riding experience.

5. Battery and Charging



Do not cover up the charger when plugged in or charging. The charger air cools and needs to be on a hard, flat surface in an open space. Use the charger with the indicator light facing upwards. Do not use the charger inverted, which can inhibit cooling and reduce charger lifespan.



If the battery is physically damaged, non-functional, performing abnormally, or was dropped or involved in a crash, with or without obvious signs of damage, please discontinue use and charging and contact Ariel Rider immediately. Ariel Rider shall not be responsible for any and all damages or injuries resulting from physically damaged, non-functional, abnormally performing, or otherwise damaged batteries.



Do not open the battery housing, which will void the warranty and can result in damage to the battery, or property, serious injury, and/or death. Ariel Rider shall not be responsible for any and all damages or injuries resulting from opening the battery housing.

IMPORTANT: YOUR BATTERY WILL ENTER SLEEP MODE AFTER 20 MINUTES OF INACTIVITY, OR WHEN REMOVED FROM THE BIKE FRAME. TO WAKE THE BATTERY, THE FRAME POWER SWITCH MUST BE CYCLED OFF THEN ON. IF REMOVING THE BATTERY FROM THE BIKE, THE BATTERY WILL REMAIN IN SLEEP MODE UNLESS WAKENED BY HOLDING DOWN THE CHARGE INDICATOR BUTTON FOR 5 SECONDS. DO NOT INSTALL THE BATTERY ON THE BIKE WHILE IT IS IN THE AWAKENED STATE.

Charging Instructions – Step-by-Step Guide for Safe Charging



Always charge your battery in temperatures between 50 °F – 77 °F (10 °C – 25 °C) and ensure the battery and charger are not damaged before initiating charge. If you notice anything unusual while charging, please discontinue charging and use of the bike and contact Ariel Rider for help.

Properly charging your Ariel Rider X-Class battery is essential for maintaining its performance, safety, and longevity. Follow these steps to ensure safe and effective charging:

1. Choose a Safe Charging Area

- Select a dry, well-ventilated location away from flammable materials, direct sunlight, and extreme temperatures.
- Ensure the charging area is stable and free from water or moisture.

2. Prepare the Charger and Battery

- Use only the original charger provided with your Ariel Rider X-Class. Using incompatible chargers can damage the battery and void the warranty.
- Inspect the charger and cables for any visible damage. Do not use damaged equipment.

3. Power Off the Bike

- Turn off the battery/main power switch, and ensure the bike is stationary.
- Remove the battery from the bike if you prefer to charge it separately.

4. Connect the Charger to the Battery

- Align the charger's plug with the battery's charging port, ensuring proper orientation.
- Gently insert the plug without forcing it to avoid damaging the connectors.

5. Plug the Charger into the Wall Outlet

- Connect the charger to a properly grounded electrical outlet. Avoid using extension cords or power strips that may not support the charger's voltage requirements.

6. Monitor the Charging Process

- Observe the charger's indicator light:
 - Red light: Charging in progress.
 - Green light: Battery fully charged.
- Do not leave the battery unattended while charging.

7. Disconnect the Charger After Charging

- Once fully charged (green light), unplug the charger from the wall outlet first.
- Then disconnect the charger from the battery, carefully replacing any protective caps on the charging port.

8. Store the Battery Safely

- If not using the battery immediately, store it in a cool, dry place.
- Avoid leaving the battery connected to the charger for extended periods to prevent overcharging.

Additional Safety Tips

- Do not charge the battery near combustible materials or in wet conditions.
- Never charge a damaged or swollen battery. If the battery shows signs of damage, contact customer support immediately.
- Charge the battery at least once every three months if stored for an extended period to maintain optimal performance.

By following these steps, you can safely and effectively charge your Ariel Rider X-Class battery while maximizing its performance and lifespan.



Use caution to avoid damage to battery connector terminals, which are exposed when the battery is unlocked and removed from the frame of the bike. In the case of damage to the terminals or battery mounts, please discontinue use and contact Ariel Rider Technical Support immediately. Ariel Rider shall not be responsible for any and all injuries or damage resulting from damaged batteries.



Please take special care in charging your bike from Ariel Rider in accordance with the procedures and safety information detailed in this manual. Failure to follow proper charging procedures can result in damage to your bike from Ariel Rider, the battery, the charger, personal property, and/or serious injury or death. Ariel Rider shall not be responsible for any and all damages or injuries resulting from improper charging.

Long-Term Care – Tips for Extending Battery Life

Proper care and usage of your Ariel Rider X-Class battery can significantly extend its lifespan and maintain its performance. Follow these tips to get the most out of your battery:

1. Avoid Extreme Temperatures

- Store and operate the battery in temperatures between 50°F and 77°F (10°C and 25°C) whenever possible.
- Avoid exposing the battery to extreme heat (e.g., direct sunlight, hot vehicles) or cold environments for prolonged periods, as these can degrade its capacity over time.

2. Charge Smartly

- Charge the battery before it drops below 20%, as deep discharges can reduce its overall lifespan.
- Avoid overcharging by disconnecting the charger once the battery is fully charged. Leaving it connected for extended periods can strain the cells.

3. Partial Charging for Storage

- If storing the bike or battery for an extended time, charge the battery to about 50–70% capacity before storing. Check and recharge every three months to prevent over-discharge.

4. Use the Original Charger

- Always use the charger provided by Ariel Rider or one recommended for your specific battery model. Third-party chargers may not regulate voltage and current properly, leading to long-term damage.

5. Avoid Fully Draining the Battery

- Try not to completely drain the battery, as this puts unnecessary stress on the cells. Plan your rides to finish with some charge remaining

6. Store Safely

- Keep the battery in a cool, dry, and well-ventilated location away from flammable materials.
- Never store the battery near corrosive substances, high humidity, or in environments prone to temperature fluctuations.



Please adhere to the instructions provided for properly storing your Ariel Rider motorbike and battery. Failure to follow the recommended battery storage procedures may result in a non-functional battery, and such damage will not be covered under warranty. Ariel Rider assumes no responsibility or liability for any damages, injuries, or losses resulting from improper battery storage. Proper storage is essential to ensure the safety, performance, and longevity of your bike and battery.

7. Handle with Care



- Avoid dropping, puncturing, or applying excessive pressure to the battery. Physical damage can lead to cell degradation or dangerous conditions like leaks or swelling.

8. Regular Usage

- Use the battery regularly to keep it active. Batteries that sit unused for extended periods can lose capacity more quickly.

9. Reduce Heavy Loads

- Minimize riding with heavy loads or at the maximum throttle for long durations, as these conditions place a higher demand on the battery and increase wear.

10. Inspect Regularly

- Periodically check for any signs of damage, swelling, or corrosion. If you notice anything unusual, stop using the battery and contact Ariel Rider customer support immediately.

By following these tips, you can maximize your Ariel Rider X-Class battery's lifespan and performance, ensuring a reliable and enjoyable riding experience for years to come.

6. Operating the Bike



NOTICE: Do not perform any of the steps outlined in the [operating the bike](#) section of this manual until you have read the entire manual thoroughly. Critical safety details are included in subsequent sections, and skipping them could result in unsafe operation.

Before operating your Ariel Rider motorbike, users must become fully familiar with its power control system. The throttle mechanism provides immediate full power, even from a stop, and inexperienced riders should exercise extra caution when using it for the first time. The pedal-assist feature is another powerful function, and users must fully understand its operation before attempting their first ride. Failing to practice and familiarize yourself with the motorbike's power system can lead to serious injury or death. Please heed this warning. Ariel Rider shall not be held responsible for any injuries, damages, or losses caused by improper use of an Ariel Rider motorbike.

For your safety, always follow the instructions and warnings in this manual. Do not attempt to operate your Ariel Rider motorbike until you have a thorough understanding of its controls and operation. Damage resulting from failure to follow these instructions is not covered under warranty and may lead to personal injury, harm to others, property damage, and damage to your motorbike.

If you have any questions about assembly, operation, or any other aspect of your Ariel Rider motorbike, please contact Ariel Rider customer support before proceeding. Ariel Rider assumes no liability for damages or injuries resulting from misuse of the motorbike or failure to adhere to the guidelines and warnings in this manual. Always prioritize safety and use your Ariel Rider motorbike responsibly.

Powering On and Off

Main Power/Battery on/off switch:

- Press in the power switch on the side of your ebike frame. This turns on the main battery and will remain in the recessed position until pressed again. If your bike has the optional 2nd battery, press in the power switch on it as well.
- NOTE: The 2nd battery will only turn on if the main power switch is turned on. It is not possible to turn on the 2nd battery without turning on the main battery.
- Press these switches again to turn off the batteries and power off the bike.

Display/Controller/Motor:

- Press and hold the power button located on the keypad on your handlebars. The Main Power switch and 2nd battery (if equipped) power switches will illuminate. The display will begin its startup sequence, and then be ready to ride.
- NOTE: It is not necessary to switch off the bike with the display keypad. It is best practice, and recommended to use the main power switch on the frame to turn off the bike after riding.

IMPORTANT: YOUR BATTERY WILL AUTOMATICALLY GO INTO "SLEEP MODE" AFTER 20 MINUTES OF INACTIVITY. TO WAKE IT UP, PRESS THE MAIN POWER SWITCH TWICE (OFF THEN ON).

Pedal Assist and Throttle

How to Adjust Assist Levels and Use the Throttle Safely

The Ariel Rider X-Class allows you to tailor your riding experience using adjustable pedal-assist levels and a throttle for added convenience. Proper use of these features enhances your ride while maintaining safety.

Adjusting Assist Levels/Activating the Throttle

1. Turn On the Bike

Power on your e-bike by pressing the main power switch and then the power button on the handlebar keypad.

2. Access the Assist Levels

- Use the up (“+”) and down (“-”) buttons on the display or control panel to adjust the pedal-assist level.
- Pedal-assist levels typically range from 0 (no assist/no throttle) to 5 (maximum assist).

3. Select the Appropriate Assist Level

- Level 0: No motor assistance; ride like a traditional bicycle. Throttle is disabled.
- Level 1-2: Low assistance for casual cruising or conserving battery life.
- Level 3-4: Moderate assistance for hills or faster speeds.
- Level 5: Maximum assistance for steep inclines or when more power is needed.

4. Transition Smoothly

- Adjust assist levels gradually to avoid sudden surges in power, which can be unsafe, especially in crowded or uneven areas.
-

IMPORTANT: YOUR BATTERY WILL ENTER SLEEP MODE AFTER 20 MINUTES OF INACTIVITY. TO WAKE IT UP, PRESS AND HOLD THE POWER BUTTON ON THE BATTERY.

Using the Throttle Safely

1. Locate the Throttle

The throttle is typically positioned on the right handlebar and can be activated by twisting or pressing it gently.

2. Start Slowly

Gently engage the throttle to avoid sudden acceleration. This is particularly important when starting from a stop or riding in tight spaces.

3. Control Your Speed

Use the throttle to complement the pedal-assist when additional power is needed, such as overtaking or climbing hills. Always maintain a controlled speed appropriate for the terrain and traffic conditions.

4. Avoid Overuse

Limit throttle use on steep inclines or during heavy load conditions to prevent overheating the motor or draining the battery too quickly.

5. Safety Precautions

Keep both hands on the handlebars at all times when using the throttle.

Do not engage the throttle while dismounting or walking the bike to avoid unintended movement.

In areas with pedestrians or narrow paths, rely on pedal assist rather than the throttle for greater control.

Additional Safety Tips

- Always start at a lower assist level or with light throttle use until you are comfortable.
- Always start with pedaling, not throttle support.
- Test the throttle and assist settings in a safe, open area to familiarize yourself with their responsiveness.
- Adjust settings as needed for weather, terrain, or riding conditions.

By mastering the use of pedal-assist levels and the throttle, you can enjoy a smoother and safer ride while making the most of your Ariel Rider X-Class's advanced features.

NOTICE:

Even if you are an experienced rider, it is essential to read and follow the guidelines outlined in the owner's manual for your X-Class 60V, as well as the manuals accompanying each subcomponent of your motorbike. These documents contain critical information to ensure your safety and the proper operation of your Ariel Rider motorbike.



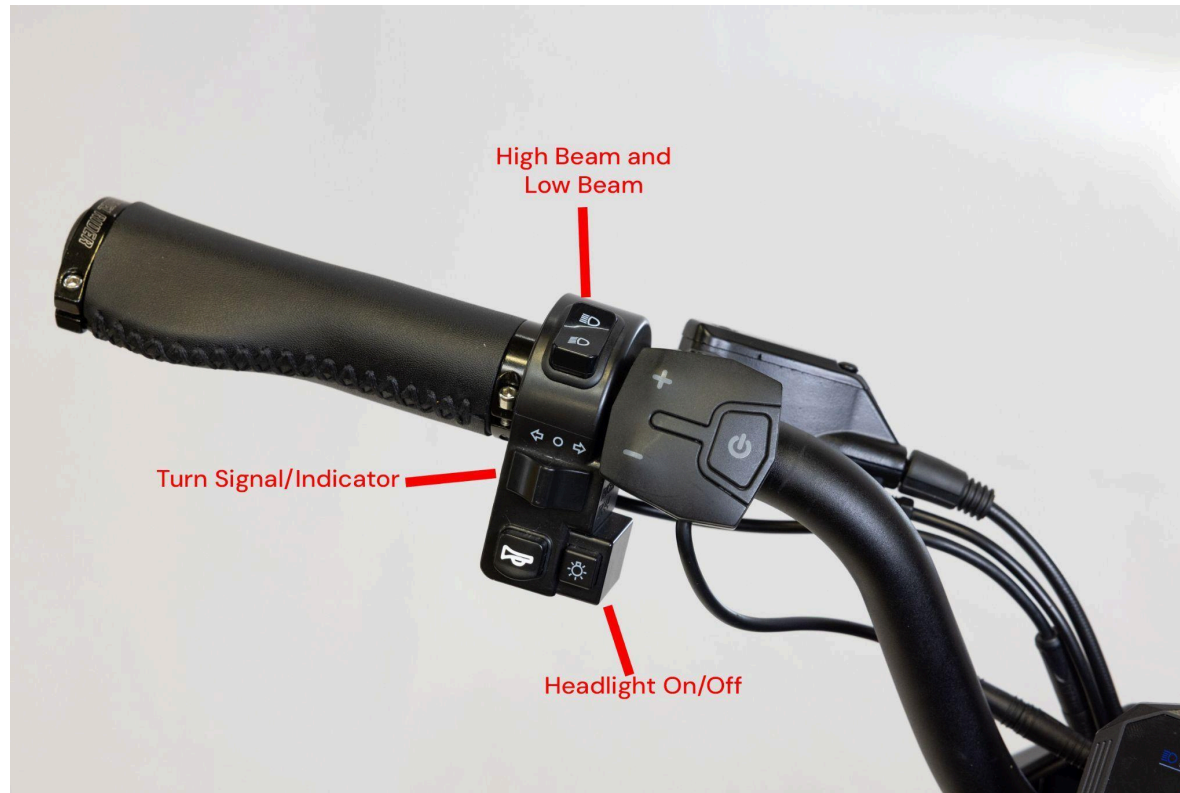
Users must take the time to familiarize themselves with the bike's power control system before riding. The throttle mechanism is designed to deliver full power instantly, even from a complete stop, which requires careful handling, especially for new or inexperienced users. Similarly, the pedal-assist feature provides significant power, and it is vital to fully understand its functionality before attempting to use it.



Failing to properly familiarize yourself with the operation of the power system on your Ariel Rider motorbike can result in serious injury or death. Please heed this warning and take the necessary precautions to ensure safe use. Your safety is our priority.

Headlights and Indicators

- Turning lights on/off and checking functionality.



Forks

- Adjustment is done via the knob shown below:



Shocks

- Adjustments can be done from the knob shown in the photo below (if applicable):

Compression adjustment



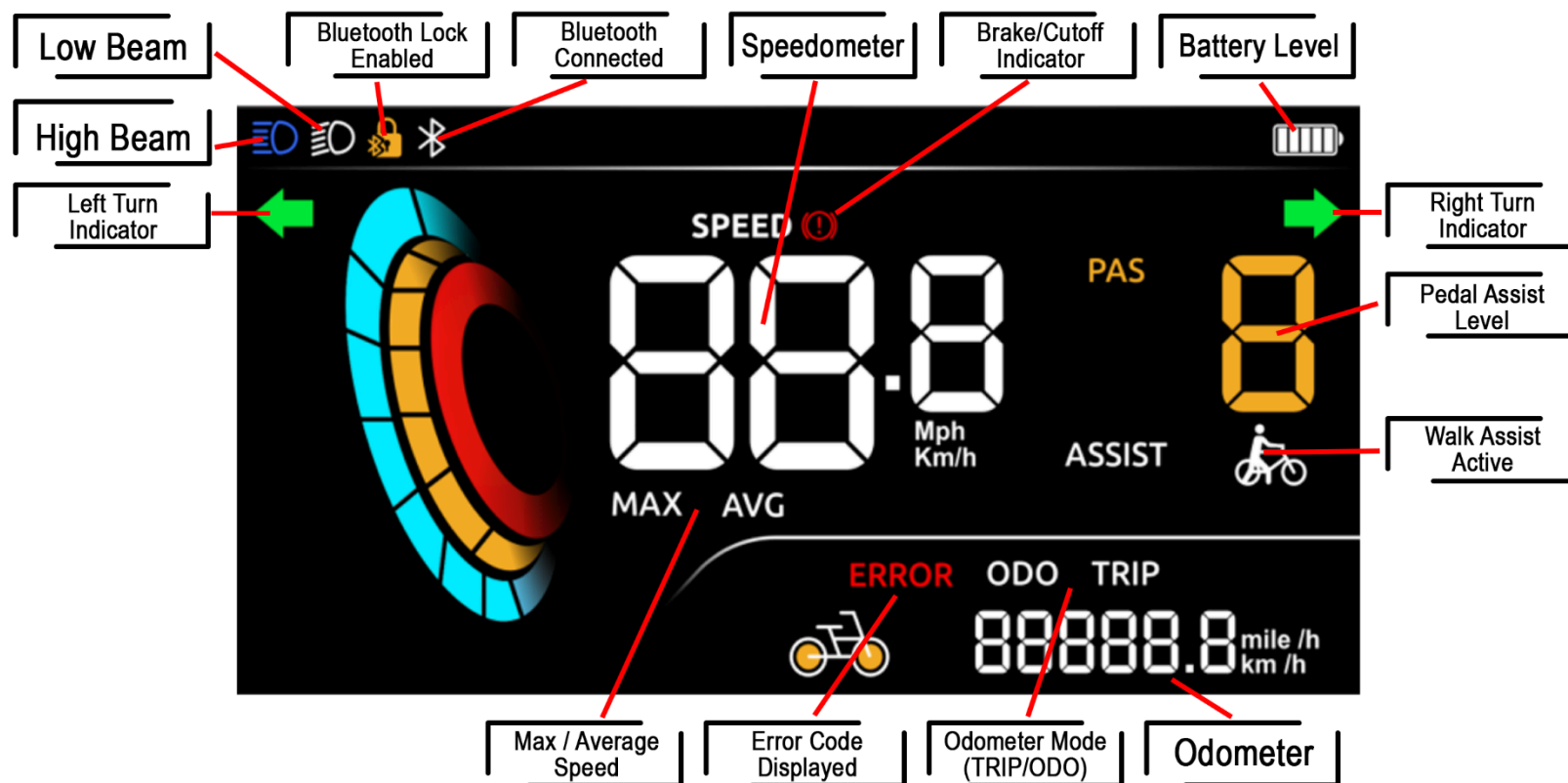
Rebound adjustment



7. Display Instructions



Display Overview



Keypad

The Keypad has 3 buttons: "Power", "+ (plus)", and "- (minus)".

As shown in the image below:



Key Functions

Turning on the display::

1. Make sure the main/battery power switch is on and illuminated.
2. Long press the power button on the display keypad for 3 seconds. Display will turn on.

Walk Assist

Walk assist provides a small amount of motor power at low speeds to help at times when you are walking with the bike. This can be helpful in certain situations like walking the bike up a driveway or hill. Follow these steps to use Walk Assist properly and safely:

1. Set Pedal Assist to level 0. This disables the throttle to prevent accidental throttle activation and subsequent loss of control of the bike.
2. Hold down the – key while pushing the bike to activate Walk Assist mode.

Speedometer Mode and TRIP/ODOMETER display:

- Press the power button once to briefly display the maximum (MAX) speed of the current riding session.
- Press the power button 2 times to briefly display the average (AVG) speed of the current riding session.
- Press the power button 4 times to change the trip mileage display to odometer (ODO)
- NOTE: Each time the bike is turned off, the MAX and AVG speeds are reset to 00.0 mph. Also the display will revert to showing the TRIP mileage.



Battery Charge Level:

- When the battery is fully charged, all five power lights will be illuminated. If the battery starts to flash, it indicates that the voltage is low and requires immediate charging. Please refer to the figure below for clarification



Advanced Settings

To enter the Advanced Settings menu, the bike must be stationary (not moving). For the best safety and reliability, many of these settings should be left at their default values.

To access the Advanced Settings menu, and make adjustments:

- Double-click the power button to enter the personalized parameter setting interface.
- Press the + or - button to cycle through the available setting.
- Press the power button once to make a change to the shown setting.
- Press the + or - buttons to change the value, using the power button to advance and save.
- Double-click the power button to exit the Advanced Settings menu, or to cancel a change without saving.

Advanced Settings (continued)

P1 – Unit Setting menu of the speedometer (miles or kilometers)

- Use the + and - buttons to choose either 0 (kph) or 1 (mph). Press the power button to save your selection and return to the Advanced Settings menu:



Advanced Settings (continued)

P2 – Pedal Assist (PAS) levels setting: (default 0-5)

- This setting adjusts the number of selectable Pedal Assist (PAS) levels: 0-3, 1-3, 0-5, 1-5, 0-9, 1-9
- NOTE: The maximum power output does not change, this only changes the number of increments between minimum and maximum assist. Advanced Settings
- WARNING: Choosing 1-3, 1-5, or 1-9 will disable the ability to deactivate the throttle (PAS level 0). It is recommended to keep PAS 0 available so the throttle can still be deactivated when desired.
- Use the + and - buttons to select the desired setting. Press the power button to save your selection and return to the Advanced Settings menu.



Advanced Settings (continued)

P3 – Wheel Diameter setting: (default 24.0)

- The wheel diameter can be adjusted to match the installed wheel and tire diameter. This can be adjusted in increments of 0.5 inches if desired.
- Use the + and - buttons to select the desired wheel diameter (8-30). Press the power button to save your selection, and return to the Advanced Settings menu:



Advanced Settings (continued)

P4 – Speed limit option: (default 20mph)

- Not Adjustable/locked.



Advanced Settings (continued)

P5 – Boot Password enable (default: n):

- To enable the boot password select 'y' (default password 1919).
- Press the power button to save your selection, and return to the Advanced Settings menu



Advanced Settings (continued)

P6 – Modify the boot password (default 1919)

- To change the boot password, start by entering the old password. If you enter the correct password, you will see the prompt "PAS." If the password is incorrect, you will receive an "ERROR" message.
- After successful entry of the old password, input the new password using the + and – keys. Press the power key to advance to the next digit.
- If you make a mistake, or if you decide not to change anything, double press the power key to return to the setting selection menu.



-

Advanced Settings (continued)

P7 – Automatic Shutdown Setting (default 8)

- NOTE: This setting only affects automatic shutdown of the bike via the display. The batteries have their own non-adjustable automatic shutdown that activates after 20 minutes of inactivity. It is always recommended to use the main power switch to turn off the power when you are finished riding your bike.
- You can set the automatic shutdown timer for anywhere between 0 and 60 minutes. Though, due to the battery automatic shutdown timer, this is only effective if set between 1-20 minutes.
- Setting it to 0 disables automatic shutdown of the display, and the bike will shut down after 20 minutes.
- Use the + and - buttons to select the desired time. Press the power button to save your selection and return to the Advanced Settings menu.



Advanced Settings (continued)

P8 – TRIP reset:

- Select 'y' to clear the trip mileage;
- After making your selection, press the Power Button once to confirm and return to the Advanced Settings menu.



Advanced Settings (continued)

bt – Bluetooth Unlock setting (default: n)

- This setting enables the Bluetooth Unlocking function. This feature is designed as an easy way to unlock the display just by connecting to the bike through the app. It provides an easy way to bypass the lock screen when the Boot Password feature is used.
- Select 'n' (off) or 'y'] (on)
- Press the Power Button once to save your selection and return to the Advanced Setting menu.
- NOTE: Bluetooth Unlock only functions if the Boot Password feature (P5) is enabled.



Advanced Settings (continued)

bU – Bluetooth Unlock distance level setting (default: 5)

- This setting adjusts the distance to unlock the bike with the Bluetooth Unlock function.
- 1 is the closest distance,
- 5 is the longest distance
- Press the + and - keys to make your selection. Press the Power Button to save and return to the Advanced setting selection menu.
- NOTE: Distance varies between mobile phone models. The strength of the Bluetooth signal will affect the effective distance:



Advanced Settings (continued)

bv – Bluetooth version information

- This menu option displays the Bluetooth software version of the display. This is not an adjustable setting.



ERROR CODES

If the electric control system of the electric vehicle malfunctions, the display will automatically show an error code. Please refer to the list below for detailed definitions of each error code:

Error Code	Description
04	Throttle not at 0/rest when powering on the bike.
07	Battery Voltage is too low.
08	The Motor Hall signal is not functioning properly
09	Motor phase line short circuit or open circuit
10	Motor Overheated
11	The motor temperature sensor is malfunctioning
12	The current sensor is malfunctioning
14	Controller Overheated
15	Controller Temperature Sensor is malfunctioning
21	Speed Sensor Error
25	Cadence sensor signal error
26	Cadence sensor, or speed signal is malfunctioning
30	Display unable to communicate with controller

8. Pre-Ride Checklist

Before every ride, it's essential to perform a quick pre-ride inspection of your Ariel Rider X-Class to ensure safety and optimal performance. Use this checklist to verify key components:

1. Tire Pressure Recommendations



- Check the tire pressure using a reliable pressure gauge.
- Inflate tires to the recommended PSI range, typically marked on the sidewall of the tire:
 - Front and Rear Tires: Maintain between 20–30 PSI, depending on your weight and riding conditions.
 - Higher pressure is ideal for smooth roads, while slightly lower pressure improves traction on uneven terrain.

- Inspect tires for any visible damage, such as cuts, punctures, or excessive wear. Replace if necessary.
-

2. Brake Functionality Tests

- Check Brake Levers: Squeeze the brake levers to ensure they feel firm and responsive. They should not feel spongy or touch the handlebars when fully engaged.
 - Inspect Brake Pads: Verify that the pads make proper contact with the rotor and are not worn beyond the manufacturer's minimum thickness recommendation.
 - Test Braking Power: Walk the bike forward and apply each brake individually (front and rear) to confirm they provide adequate stopping power without noise or vibration.
 - Hydraulic Brakes (if applicable): Ensure there are no visible leaks, and the brake fluid is at the correct level.
-

3. Ensuring All Connections Are Secure

- Cables and Wires: Inspect all electrical cables and connectors to ensure they are securely fastened and free from damage or wear.
 - Battery: Confirm the battery is properly seated in its compartment, locked in place, and has sufficient charge for your ride.
 - Bolts and Screws: Check that all bolts and fasteners on critical components such as the handlebars, wheels, pedals, and suspension are tightened to the recommended torque specifications.
 - Accessories: Ensure accessories like the kickstand, fenders, and lights are securely attached and functioning correctly.
-

4. Final Check

- Spin both wheels to ensure they rotate freely without wobbling or rubbing against the brake pads.
- Power on the bike and verify that the display, lights, and motor systems are operational.
- Take a brief test ride in a safe area to confirm that all systems function properly.

Performing this pre-ride checklist ensures your Ariel Rider X-Class is safe and ready for every adventure, giving you confidence and peace of mind on the road.

9. Maintenance and Troubleshooting

Regular Maintenance

To ensure optimal performance and safety, adhere to the following inspection schedule. Neglecting these tasks may lead to unsafe operation, void the warranty, and increase the risk of injury or damage. Ariel Rider assumes no liability for damages or injuries resulting from failure to perform proper maintenance.

To keep your Ariel Rider X-Class in peak condition and ensure a safe, reliable ride, regular maintenance is essential. Proper cleaning, lubrication, and component inspections will help extend the lifespan of your ebike and enhance its performance.

1. Cleaning and Lubrication

Cleaning the Bike:

- Use a soft, damp cloth to clean the bike frame, wheels, and components after each ride, especially if exposed to dirt, mud, or salt.
 - Avoid using high-pressure water, as it can damage sensitive components like the motor, BMS, or electrical connectors.
 - Dry the bike thoroughly after cleaning to prevent moisture from causing rust or electrical issues.
-

Lubricating Moving Parts:

- Apply a high-quality bicycle chain lubricant to the chain every 100–150 miles or more frequently in wet or dusty conditions.
 - Clean the chain with a degreaser before reapplying lubricant if it is excessively dirty.
 - Inspect and lubricate other moving parts, such as the pedals, derailleur (if applicable), and suspension pivots, to ensure smooth operation. Avoid over-lubrication, which can attract dirt and debris.
-

2. Component Inspection Schedule

These inspections are critical to maintaining safety and durability. Riders who push their bikes to the limit should perform inspections more frequently.

Weekly (or Every 50 Miles)

- Tires:
 - Check tire pressure using a reliable gauge and maintain it within the recommended PSI range.
 - Inspect for cuts, punctures, bulges, or uneven wear. Replace damaged or excessively worn tires immediately.
- Brakes:
 - Inspect brake pads for wear and ensure rotors are not warped or cracked.
 - Test brake lever responsiveness and ensure no excessive travel. Adjust as needed.
- Axle Nuts/Quick Releases:
 - Confirm axle nuts or quick-release mechanisms are tight and secure. Loose axles can lead to instability or wheel detachment.
- Spoke Tension:
 - Check spoke tension by lightly squeezing pairs of spokes to ensure even tension. Tighten or replace loose or damaged spokes to prevent wheel failure.
- Cables and Connections:

- Inspect all cables (mechanical and electrical) for wear, fraying, or loose connections. Secure or replace damaged cables immediately.
- Headset and Handlebar:
 - Ensure the headset is tight and handlebars are properly aligned with the front wheel. Check for any play or unusual noises when turning.
- Pedals and Crank Arms:
 - Check that pedals are securely attached to the crank arms and that crank arms are tight to the bottom bracket.

Monthly Maintenance Checklist (or Every 200 Miles)

Perform all Weekly Checks plus the following:

- Chain and Drivetrain:
 - Measure chain wear using a chain wear gauge and inspect for stiffness or rust. Replace the chain if elongation exceeds specifications.
 - Inspect the chainring and cassette for worn or damaged teeth. Replace components if wear compromises smooth operation.
- Battery Inspection:
 - Examine the battery case for cracks, swelling, or other damage.
 - Test charging and discharging functionality to ensure consistent performance.
 - Clean the battery terminals with a dry, soft cloth and check for corrosion.
- Brake Pads and Rotors:
 - Inspect brake pads for uneven wear and thickness. Replace if below the manufacturer's minimum specification.
 - Clean brake rotors with isopropyl alcohol to remove dirt and maintain braking efficiency.

- Suspension (if applicable):
 - Check for leaks, dirt buildup, or scratches on the stanchions or seals. Clean the suspension and lubricate seals as necessary.
- Bolts and Fasteners:
 - Tighten all bolts to the manufacturer's torque specifications. Pay special attention to high-stress areas, such as the handlebar stem, suspension, motor mounts, and axle nuts.
- Tire Condition:
 - Rotate tires to ensure even wear, especially if one tire bears more load.
 - Remove embedded debris from treads to prevent punctures.
- Lights and Reflectors:
 - Ensure headlights, taillights, and reflectors are securely mounted and functional. Replace bulbs or recharge batteries as needed.

Six-Month Maintenance Checklist (or Every 1,000 Miles)

Perform all Weekly and Monthly Checks plus the following:

- Suspension Inspection:
 - Test front and rear suspension for proper rebound and compression.
 - Check for wear on pivot points and lubricate or replace parts as needed.
- Drivetrain Inspection and Adjustment:
 - Inspect the cassette and derailleur for alignment and smooth shifting.
 - Adjust derailleur tension and limit screws to ensure accurate gear changes.
 - Clean the crankset and ensure the bottom bracket rotates freely without noise.
- Electrical System:
 - Test all motor functions, including throttle and pedal assist, for consistent performance.
 - Inspect cables and connectors for wear, fraying, or corrosion. Repair or replace damaged components.
 - Verify that the display and control settings operate correctly and update firmware if applicable.
- Wheel Alignment and Spoke Tension:
 - Inspect wheels for trueness and adjust spoke tension as needed to maintain alignment.

- Check for cracks or deformation in the rims and replace damaged wheels immediately.
- Kickstand and Frame Inspection:
 - Test the kickstand for stability and inspect the mounting hardware. Tighten or replace as necessary.
 - Examine the frame for cracks, scratches, or stress points that could compromise safety.
- Brake System Bleed (if hydraulic brakes):
 - Perform a brake bleed to remove air bubbles and ensure consistent braking performance.
 - Refill with manufacturer-recommended brake fluid and check for leaks.

Annual Maintenance Checklist (or Every 2,000 Miles)

Perform all Weekly, Monthly, and Six-Month Checks plus the following:

- Professional Tune-Up:
 - Schedule a full inspection with a certified bike mechanic to address advanced maintenance tasks and ensure all components meet safety standards.
- Full Drivetrain Overhaul:
 - Remove and deep clean the chain, cassette, derailleur, chainring, and crankset.
 - Replace any drivetrain components that show excessive wear.
 - Inspect the bottom bracket for wear or play, and replace if necessary.
- Suspension Service (if applicable):
 - Disassemble and clean the suspension components.
 - Replace seals, bushings, and oil per manufacturer recommendations.
 - Test suspension for proper operation after servicing.
- Electrical System Comprehensive Check:
 - Conduct a full diagnostic test of the motor, battery, display, and controller.
 - Update firmware and software if required.

- Replace any electrical components showing signs of aging or degradation.
- Frame and Structural Integrity:
 - Perform a detailed inspection of the entire frame for cracks, bends, or signs of metal fatigue.
 - Check all welds and joints for stress or failure points.
- Brake System Overhaul:
 - Replace brake pads and rotors if wear exceeds manufacturer limits.
 - Recheck hydraulic systems for leaks and replace seals if necessary.
- Wheel Bearing Replacement:
 - Inspect and replace wheel bearings to maintain smooth operation and reduce rolling resistance.
- Tire Replacement:
 - Replace tires if tread wear is excessive or if sidewalls show cracks or damage.

General Tips

- Always address issues immediately to prevent minor problems from becoming larger, costly repairs.
- Replace worn or damaged components promptly to maintain safety and performance.
- Keep records of maintenance to ensure all inspections and servicing are up to date.

By performing regular cleaning, lubrication, and inspections, you can keep your Ariel Rider X-Class in excellent condition for years of enjoyable riding.

Liability Disclaimer



Failure to perform the recommended maintenance, neglecting component wear, or continuing to use damaged or worn parts can lead to serious injury, unsafe operation, or void the warranty. Ariel Rider disclaims any liability for damages, injuries, or failures resulting from insufficient maintenance or improper repairs. For advanced maintenance tasks, always consult a certified, reputable bike mechanic.

Troubleshooting Guide

If you experience issues with your Ariel Rider X-Class, this guide provides solutions for some of the most common problems. For additional support, scan the QR code below to access detailed video tutorials and step-by-step instructions or visit arielrider.com/helpcenter.



1. Battery Not Charging

Possible Causes and Solutions:

- Charger not connected properly:
 - Ensure the charger is securely plugged into both the battery and a functioning wall outlet.
- Damaged charger or cables:
 - Inspect the charger and its cables for visible damage. Replace if necessary.
- The battery is overheated or too cold:
 - Allow the battery to cool down or warm up to room temperature (50°F to 77°F / 10°C to 25°C) before charging.
- Faulty battery port or charger:
 - Test with another compatible charger to determine if the issue lies with the battery or the charger.

2. Motor Not Starting

Possible Causes and Solutions:

- The power switch is off:
 - Ensure the bike is powered on, and the display is active.
- Battery not connected securely:
 - Check that the battery is properly seated and locked into place.
- Loose or damaged cables:
 - Inspect the motor wiring for any loose or damaged connectors. Reconnect or repair as needed.
- Error code on the display:
 - Refer to the error codes section of the manual to identify and resolve the specific issue.
- Throttle or pedal-assist malfunction:
 - Test both throttle and pedal-assist modes to determine which is not working. Contact support if neither functions.

3. Display Not Turning On

Possible Causes and Solutions:

- Battery is dead:
 - Charge the battery fully and try powering on the display again.
- Loose display connections:
 - Inspect the display wiring to ensure all connections are secure.
- Faulty display unit:
 - If the issue persists, the display may need replacement. Contact Ariel Rider support for assistance.

4. Unusual Noises During Operation

Possible Causes and Solutions:

- Loose components:
 - Check for loose bolts or fasteners on the motor, wheels, or drivetrain and tighten as needed.
- Dirty or dry chain:
 - Clean and lubricate the chain to eliminate squeaking or grinding noises.
- Worn brake pads:
 - Inspect brake pads for wear and replace them if necessary.

5. Bike Won't Power Off

Possible Causes and Solutions:

- Display malfunction:
 - Hold the power button for 5-10 seconds to force a reset.
 - Battery stuck in ON mode:
 - Remove the battery from the bike to disconnect the power and then reinstall it.
-

QR Code for Video Tutorials

Scan the QR code below for step-by-step video tutorials covering assembly, troubleshooting, and maintenance.



Alternatively, visit the helpcenter on our website:

<https://arielrider.com/helpcenter>

If your issue persists after following this guide, please contact Ariel Rider customer support for further assistance.
We're here to help get you back on the road!

10. Warranty and Support

Warranty Terms

The Ariel Rider X-Class is backed by a comprehensive warranty to ensure your satisfaction and peace of mind. Please read the following warranty terms carefully to understand coverage, exclusions, and the process for making a claim.

1. Warranty Coverage Details

- **Frame:** The frame is covered for 5 years against manufacturing defects in materials and workmanship.
- **Battery:** The battery is covered for 12 months from the date of purchase against defects in materials or workmanship. Coverage includes failure to hold charge within standard performance levels but excludes normal capacity degradation over time.
- **Electrical Components:** The motor, controller, display, and wiring are covered for 12 months against manufacturing defects.
- **Mechanical Components:** Items such as the suspension, brakes, drivetrain, and pedals are covered for 12 months from the date of purchase against defects in materials or workmanship.

2. Warranty Exclusions

The warranty does not cover the following:

- Normal wear and tear, including but not limited to brake pads, tires, chains, and grips.
- Damage caused by misuse, neglect, abuse, improper assembly, or unauthorized modifications.
- Issues arising from failure to follow proper maintenance or storage procedures outlined in the user manual.
- Damage resulting from accidents, collisions, or natural disasters.
- Batteries that have been tampered with, subjected to extreme temperatures, or charged using a non-approved charger.
- Cosmetic damages such as scratches, dents, or paint discoloration.
- Components replaced or repaired by unauthorized personnel.

3. Steps for Making a Warranty Claim

Step 1: Review the Warranty Terms

- Confirm that the issue you are experiencing is covered under the warranty. Refer to the coverage details and exclusions above.

Step 2: Gather Documentation

- Collect the following information:
 - Proof of purchase (receipt or invoice).
 - Serial number of your X-Class (located on the bike frame).
 - Photos or videos clearly show the defect or issue.

Step 3: Contact Customer Support

- Reach out to Ariel Rider customer support via:
 - Email: info@arielrider.com
 - Phone: +1 (800) 573-1840
- Provide a detailed description of the problem and attach the required documentation.

Step 4: Evaluation and Approval

- Ariel Rider's technical team will review your claim and may request additional information or perform a diagnostic evaluation.
- If approved, the defective part will be repaired or replaced at no cost to you, subject to the warranty terms.

Step 5: Shipping and Repairs

- If a replacement or repair is required, Ariel Rider will provide instructions on how to proceed. Shipping costs for returning the product may be the customer's responsibility, depending on the claim.
-

Important Notes

- Warranty claims must be initiated within the applicable warranty period.
- Unauthorized repairs or modifications will void the warranty.
- This warranty is non-transferable and applies only to the original owner of the product.

For further assistance or clarification on warranty terms, please contact Ariel Rider customer support. We're committed to ensuring your satisfaction and providing the highest quality service.

11. Legal Information

The Ariel Rider X-Class ebike is designed and manufactured to comply with relevant safety, performance, and environmental standards at the time of production. However, laws and regulations governing electric vehicles, including ebikes, vary widely across jurisdictions and are subject to change. It is the sole responsibility of the purchaser and rider to ensure compliance with all applicable local, state, and national laws where the motorbike is used.

Ariel Rider motorbikes are shipped partially assembled and require final assembly by the purchaser. It is mandatory for the final assembly and safety check to be conducted by a reputable and qualified bicycle or motorbike mechanic. This professional inspection ensures that all components, including brakes, tires, suspension, and electrical systems, are correctly installed and functioning properly before the first ride. Failure to have the bike inspected by a certified mechanic voids the warranty and may result in unsafe operation.

Ariel Rider assumes no liability for injuries, damages, or accidents resulting from improper assembly, failure to conduct a professional safety check, or unauthorized modifications.

Additionally, Ariel Rider is not liable for fines, penalties, or other consequences arising from non-compliance with local laws, including but not limited to those regarding speed limits, motor power, licensing, registration, insurance, or use on public roads, trails, or bike lanes. Riders must consult local transportation or motor vehicle authorities to ensure the Ariel Rider X-Class is operated legally within their jurisdiction.

By purchasing and using the Ariel Rider X-Class, you agree to:

1. Take full responsibility for compliance with applicable laws and regulations.

2. Have the bike professionally assembled and inspected before the first ride.
3. Hold Ariel Rider harmless against any claims, legal actions, or damages resulting from improper assembly, non-compliance with laws, or misuse of the motorbike.



Important Note: Changes in local laws or regulations after purchase do not obligate Ariel Rider to modify the motorbike or provide refunds or replacements to ensure compliance. Riders must monitor and adapt to any such changes.

Ariel Rider expressly disclaims liability for:

- Injuries, damages, or legal actions resulting from assembly errors, misuse, or operation in violation of applicable laws.
- Failure to follow safety guidelines or instructions outlined in this manual.
- Unauthorized modifications or alterations to the motorbike's components.

The Ariel Rider X-Class is sold "as is," with Ariel Rider's liability limited to the terms of the warranty. By using this product, the purchaser and rider acknowledge and accept full responsibility for its lawful operation and waive any claims against Ariel Rider for non-compliance with local regulations.

For questions about local laws, assembly, or operational requirements, consult local authorities, legal counsel, or a professional mechanic. For warranty or product inquiries, contact Ariel Rider customer support. This statement is subject to updates and revisions without prior notice.

12. General Warnings



- Read the Manual: Users must read the entire manual, including safety warnings, before operating the bike. Failure to do so can result in dangerous situations, injury, or death.
- Responsibility Assumption: Riding involves inherent risks, and users must practice safe riding and proper maintenance to reduce these risks.
- Substance Use: Never operate the bike under the influence of drugs, alcohol, or other impairing substances.
- Rider Requirements: The X-Class 60V is designed for users aged 18 and older with the physical and mental capabilities to operate safely. Consult a physician if you have impairments.



Disclaimer: By riding this vehicle, the rider or the legal guardian accepts full responsibility for ensuring compliance with the local age requirement of this vehicle. Additionally, it is solely the rider's responsibility to determine and adhere to any local, state, or federal requirements for operating this vehicle legally, including but not limited to registration, licensing, and insurance. Ariel Rider assumes no liability for any fines, penalties, damages, or consequences resulting from failure to comply with these legal obligations.

Wet Weather

- Avoid riding in wet conditions when possible.
- If necessary, reduce speed, brake early, and wear reflective clothing for visibility.
- Never submerge or immerse the bike in water, as it may damage the electrical system.

Night Riding

- Avoid riding at night unless necessary.
 - Wear reflective clothing, ensure proper lighting, and use familiar, well-lit roads.
-

Parental Responsibility

- Parents or guardians are responsible for the safety of minors. The X-Class 60V is not designed for children. Passengers in child seats must wear helmets.
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Consumer Misuse

- Ariel Rider disclaims liability for misuse of the bike, including failure to comply with state laws.
 - Specific legal requirements for various states (e.g., Washington, Texas, California, Colorado) are outlined to guide users in proper and lawful operation.
 - Users are responsible for avoiding modifications that tamper with speed or safety features.
 - Ariel Rider waives any and all liability for injuries resulting from consumer misuse of an Ariel Rider Electric Bicycle ("bike"). The subsequent information provides consumer use requirements pursuant to e-bike state laws, however the stated requirements are not exhaustive and merely serves as a reference for misuse which Ariel Rider shall accept no liability for.
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For those residing in the state of Washington, you must comply with [RCW 46](#), which provides that:

- a. You must ride the Bike on sidewalks unless there is no alternative way to travel;
- b. You shall not operate the Bike on fully controlled limited access highways;
- c. You shall not tamper with or modify the Bike so as to change its speed capability;
- d. You shall not operate a Class C Bike if You are under 16 years old;
- e. You shall not operate a Class 3 Bike on a shared-use path, except where local jurisdictions may allow the use of Class 3 electric-assisted bicycles;
- f. You shall not operate the Bike where motorized vehicles are prohibited;
- g. You shall not ride the Bike on a trail that is specifically designated as nonmotorized and that has a natural surface tread that is made by clearing and grading the native soil with no added surfacing materials.

Moreover, pursuant to [RCW 7.72](#) and applying to those residing in Washington, Ariel Rider shall not be liable for injuries resulting from the fault of the manufacturer in any scenario, including but not limited to (1) if there is no solvent manufacturer subject to service of process under the laws of the claimant's domicile or the state of Washington, (2) if the court determines that it is highly probable that the claimant would be unable to enforce a judgment against any manufacturer, (3) if Ariel Rider provides plans or specifications for the manufacture or preparation of the product and such plans or specifications were a proximate cause of the defect in the product, or (4) if the Bikes are marketed under a trade or brand name of Ariel Rider.

For those residing in the state of Texas, You must comply with [Texas Transportation Code Sec. 551](#), which provides that:

- a. You shall not ride the Bike only on or astride a permanent and regular seat attached to the Bike;
- b. You shall not use the Bike to carry more persons than the Bike is designed or equipped to carry;
- c. You shall not use the Bike to carry an object that prevents the person from operating the Bike with at least one hand on the handlebars of the bicycle;
- d. You shall not attach either the person or the Bike to a streetcar or vehicle on a roadway;
- e. You shall not impede the normal and reasonable flow of traffic on the roadway when You and someone else are riding next to each other;
- f. You shall not operate the Bike nighttime unless the bicycle is equipped with the safety equipment designated in Sec. 551.104(b)(1)–(2);
- g. You shall not operate the Bike unless the electric motor disengages or ceases to function either (1) when You stop pedaling or (2) when the brakes are applied;
- h. You shall not operate a Class 3 Bike unless You are at least 15 years of age;
- i. If You are operating the Bike on a roadway and are moving slower than the other traffic on the roadway, You shall ride as near as practicable to the right curb or edge of the roadway, unless the exceptions in Sec. 551.103(a)(1)–(4) apply.

Moreover, pursuant to [TX CIV PRAC & REM §82.003](#) and applying to those residing in Texas, Ariel Rider shall not be liable for any product liability action due to the fact that electronic bicycles are products known to be unsafe by the ordinary consumer who consumes the product with the ordinary knowledge common to the community.

For those residing in the state of California, You must comply with [AB-1096](#), which provides that:

1. Rider Responsibility and Compliance

Riders are solely responsible for ensuring that their use of the e-bike complies with all applicable federal, state, and local laws and regulations. This includes, but is not limited to, verifying that the e-bike is legal for use on public roads, bike paths, and trails in their area. Riders must familiarize themselves with and adhere to the specific e-bike classifications and restrictions in their locality. Ariel Rider is not liable for any fines, penalties, or legal actions resulting from non-compliance with such laws and regulations.

2. Mandatory Safety Inspections

Prior to each use, riders must perform a comprehensive safety inspection of the e-bike, including checking tire pressure, brake functionality, and the integrity of all components. Riders are responsible for ensuring that the e-bike is in safe operating condition before riding. Ariel Rider is not liable for any injuries or damages resulting from the rider's failure to conduct proper safety checks.

3. Assumption of Inherent Risks

Riding an e-bike involves inherent risks and dangers that cannot be entirely eliminated, including the risk of serious injury or death. By using the e-bike, riders acknowledge and voluntarily assume all associated risks. Ariel Rider is not responsible for any injuries or damages arising from these inherent risks.

4. Prohibited Modifications

Riders must not tamper with or modify the e-bike in any way that alters its speed capability or classification. Such modifications may render the e-bike illegal for use on public roads and void any applicable warranties. Ariel Rider is not liable for any consequences arising from unauthorized modifications.

5. Helmet Use and Age Restrictions

Riders are required to wear a properly fitted and fastened bicycle helmet that meets applicable safety standards while operating the e-bike. Additionally, riders must comply with all age restrictions pertinent to the e-bike's classification. Ariel Rider is not liable for any injuries or legal issues resulting from failure to adhere to helmet use and age requirements.

6. Limitation of Liability

To the fullest extent permitted by law, Ariel Rider shall not be liable for any direct, indirect, punitive, incidental, special, or consequential damages arising out of or connected with the use or misuse of our product(s). In no event shall Ariel Rider's liability exceed the value of the product(s) sold.

7. Acknowledgment of Local Ordinances

Riders must be aware that certain local jurisdictions may have additional ordinances governing the use of e-bikes, including specific restrictions on where e-bikes may be operated and additional safety requirements. It is the rider's responsibility to familiarize themselves with and adhere to all such local ordinances. Ariel Rider is not responsible for any violations of local laws or ordinances.

8. No Passenger Policy

Unless the e-bike is specifically designed and equipped to carry passengers, riders must not transport passengers on the e-bike. Carrying passengers may impair the rider's ability to operate the e-bike safely and is prohibited. Ariel Rider is not liable for any injuries or damages resulting from the transportation of passengers.

By incorporating these clauses into the X-Class user manual, Ariel Rider can effectively communicate the responsibilities of the rider and mitigate potential liabilities associated with the use of their e-bikes in California.

Recent Developments in California E-Bike Regulations and Safety Concerns

- a. You shall not operate the Bike on a bicycle path or trail, bikeway, bicycle lane, equestrian trail, or hiking or recreational trail, unless it is within or adjacent to a roadway or unless the local authority or the governing body of a public agency having jurisdiction over the path or trail permits, by ordinance, that operation;
- b. You shall not operate a Class 3 Bike if You are under 16 years of age;
- c. You shall not operate a Class 3 Bike or ride as a passenger unless wearing a properly fitted and fastened bicycle helmet that meets the requirements set forth in AB 1096 Section 21213;
- d. You shall not tamper with or modify the Bike so as to change the speed capability of the Bike, unless You appropriately replace the label indicating the Classification required in subdivision (c) of Section 312.5.

For those residing in the state of Colorado, You must comply with [C.R.S. 42-4](#), which provides that:

- a. You shall not use the Bike to carry more persons at one time than the number for which it is designed or equipped;
- b. You shall not attach Yourself to any motor vehicle upon a roadway;
- c. You shall not ride next to another electronic bike operator except on paths or parts of roadways set aside exclusively for bicycles;
- d. You shall not ride a Class 3 Bike upon any street, highway, or bike or pedestrian path if You are under 16 years of age, unless You are a passenger;
- e. You shall ride in the right-hand lane when operating on a roadway at less than the normal speed of traffic, subject to the conditions in Section 42-4-1412(5)(a);
- f. You shall keep at least one hand on the handlebars at all time;
- g. You shall comply with the parking requirements of Section 42-4-1412(11);
- h. You shall wear a bicycle helmet if You are under 18 years of age, and
 - a. That helmet shall must conform to the specifications in Section 42-4-1412(15)(b)(II)
 - b. That helmet must be secured properly on Your head with a chin strap while the Class 3 Bike is in motion.

Moreover, pursuant to [CO Rev. Stat. §13-21-402.5](#) and applying to those residing in Colorado, Ariel Rider shall not be liable for injury, death, or property damage that occurs as a result of use in a manner or for a purpose other than that which was intended and which could not reasonably have been expected, with such misuse as the cause of the injury, death, or property damage.

For those residing in the state of Illinois, You must comply with [SB 0396 Sec. 11](#), which provides that:

- a. You must operate a Class 2 Bike in a manner so that the electric motor is disengaged or ceases to function when the brakes are applied;
- b. You must operate a Class 1 and Class 3 Bike in a manner so that the electric motor is disengaged or ceases to function when You stop pedaling;
- c. You shall not operate a low-speed Bike on a sidewalk;
- d. You shall not operate a Class 3 Bike if You are under 16 years of age; however, You may ride as a passenger.

Moreover, pursuant to [IL ST CH 735 §5/13-213](#) and applying to those residing in Illinois, Ariel Rider shall not be liable for injury or damages claimed to have resulted from an alteration, modification, or change of the Bike, when that injury or damage is claimed to have resulted from said alteration, modification, or change of the Bike.

For those residing in the state of New Jersey, You must comply with [N.J.S. §39:4-14.16](#), which provides that:

- a. You shall not tamper with or modify a low-speed Bike so as to change the motor-powered speed capability or engagement of a low-speed electric bicycle, unless You appropriately replace the label indicating the Classification required in subsection b. of N.J.S. §39:4-14.16;
- b. You shall not operate the Bike on a trail designated for non-motorized traffic if such trail has a natural surface tread made by clearing and grading the soil and no surfacing materials have been added;
- c. You may not park the Bike on the sidewalk so as to impede the normal movement of pedestrian or other traffic upon the sidewalk.

Moreover, pursuant to [NJ Rev Stat §2a:58C-3](#) and applying to those residing in New Jersey, Ariel Rider shall not be liable for avoidably or unavoidably unsafe aspects of the Bike, regardless of whether or not Ariel Rider provides adequate warning or instruction. Ariel Rider shall not be responsible for injuries resulting from unsafe aspects of the Bikes, regardless of whether or not such unsafe aspects are an inherent characteristic of the product or are such that an ordinary person who uses the Bike with the ordinary knowledge common to the Class of persons for whom the product is intended is aware of such aspects.

For those residing in the state of Michigan, You must comply with [Michigan Vehicle Code Chapter 257](#), which provides that:

- a. You shall not tamper with or modify the Bike so as to change the manufactured motor-powered speed capability or motor engagement of the Bike without replacing the label required under subsection (2) with an appropriate label printed in Arial font and in at least 9-point type;
- b. You shall not operate a Class 3 Bike if You are under 14 years of age; however, You may ride as a passenger;
- c. You must wear a properly fitted and fastened bicycle helmet that meets federal standards established by the United States Consumer Product Safety Commission or the American Society for Testing and Materials if You are under 18 years of age;
- d. You shall not operate the Bike on a trail that is designated as nonmotorized and that has a natural surface tread that is made by clearing and grading the native soil with no added surfacing materials;
- e. You shall only operate a Class 2 or Class 3 electric bicycle on a linear trail that has an asphalt, crushed limestone, or similar surface, or a rail trail if authorized by the local authority or agency of this state having jurisdiction over the trail.

Moreover, pursuant to the [Revised Judicature Act of 1961 – §600.2946](#) and applying to those residing in Michigan, Ariel Rider shall not be responsible for failure to warn of a material risk that is or should be obvious to a reasonably prudent Bike user or a material risk that is a matter of common knowledge to those in the same or similar position as the person upon whose injury a claim is premised on. Ariel Rider shall not be liable for injuries resulting from product defects that could have prevented harm through the use of practical and technically feasible alternative production practices. Ariel Rider shall not be liable in a product liability claim for harm caused by misuse, alteration, or change of the Bike, regardless of whether or not the misuse was reasonably foreseeable.

For those residing in the state of Florida, You must comply with [CS/SB 1148\(4\)](#), which provides that:

- a. You shall not tamper with or modify the Bike so as to change the motor-powered speed capability or engagement of the Bike, unless the label indicating the Classification number required in subsection (3) of CS/SB 1148 is replaced after such modification.

For those residing in the state of Oregon, You must comply with [ORS 814](#), which provides that:

- a. You shall not operate the Bike on any portion of a roadway that is not a bicycle lane or bicycle path when a bicycle lane or bicycle path is adjacent to or near the roadway;
- b. You shall not operate the Bike and carry more persons on the Bike than the number for which it is designed or safely equipped;
- c. You shall not operate the Bike and carry a package, bundle or article which prevents You from keeping at least one hand upon the handlebar and having full control at all times;
- d. You shall not operate the Bike if You are under 16 years of age;
- e. You shall not operate the Bike on a highway or on premises open to the public without wearing protective headgear of the type approved by ORS 815.052 if You are under 16 years of age;
- f. You shall not commit the offense of unsafe operation of the Bike on a sidewalk, which includes but is not limited to:
 - a. Operating the Bike so as to suddenly leave a curb or other place of safety and moving into the path of a vehicle that is so close as to constitute an immediate hazard;
 - b. Not giving an audible warning before overtaking and passing a pedestrian, and not yielding the right of way to all pedestrians on the sidewalk;
 - c. Operating the Bike in a careless manner that endangers or would be likely to endanger any person or property;
 - d. Operating the Bike on a sidewalk;
 - e. Operating the Bike at a speed greater than an ordinary walk when approaching or entering a crosswalk, approaching or crossing a driveway or crossing a curb cut or pedestrian ramp and a motor vehicle is approaching the crosswalk, driveway, curb cut or pedestrian ramp (note this does not require reduced speeds for the Bike at places on sidewalks or other pedestrian ways other than places where the path for pedestrians or bicycle traffic approaches or crosses that for motor vehicle traffic).

Moreover, pursuant to [ORS 30.915](#) and applying to those residing in Oregon, Ariel Rider shall not be responsible for foreseeable and unforeseeable modifications, alterations, and/or changes to the Bike, regardless of whether or not Ariel Rider provided warning associated with modifications, alterations, or changes to the Bike.

For those residing in the state of Massachusetts, You must comply with [Massachusetts Code, Ch. 85, Sec. 11B](#), which provides that:

- a. You shall not ride a Class 3 Bike on a bike path or shared-use path unless permitted by the municipality, local authority or state agency having jurisdiction over that path;
- b. You shall not tamper with or modify the Bike so as to change the motor-powered speed capability or engagement of the Bike, unless You appropriately replace the label required by subsection (3) of Massachusetts Code, Ch. 85., Sec 11B;
- c. You shall not operate a Class 3 Bike if You are under 16 years of age; however, You may ride as a passenger;
- d. You must wear a properly fitted and fastened bicycle helmet that meets the standards provided by either the United States Consumer Product Safety Commission or the American Society for Testing and Materials, or standards subsequently established by those entities, if You are operating or riding a Class 3 Bike, regardless of Your age and whether or not You are an operator or passenger;
- e. You must ensure that the municipality or local authority having jurisdiction over the streets, roads, or ways You are operating a Class 3 Bike on allow the operation of Class 3 Bikes on those streets, roads, or ways.

Notwithstanding, even if you reside in a state that does not explicitly make any of the following activities illegal, You represent and warrant that:

- a. You shall not tamper with or modify the Bike so as to change the motor-powered speed capability or engagement of the Bike;
- b. You shall wear a properly fitted and fastened bicycle helmet that meets the standards provided by either the United States Consumer Product Safety Commission or the American Society for Testing and Materials, or standards subsequently established by those entities, regardless of Your age and whether or not You are an operator or passenger;
- c. You shall not operate the Bike in a careless manner that endangers or would be likely to endanger any person or property;
- d. You shall not operate the Bike and carry a package, bundle or article which prevents You from keeping at least one hand upon the handlebar and having full control at all times;
- e. You shall not operate the Bike and carry more persons on the Bike than the number for which it is designed or safely equipped;
- f. You shall keep at least one hand on the handlebars at all time;
- g. You shall not operate the Bike on fully controlled limited access highways;
- h. You shall not operate the Bike where motorized vehicles are prohibited.

Moreover, You represent and warrant that You must not operate the Bike with recklessness, carelessness, or disregard for the safety of Yourself or others, including but not limited to wheelies, burnouts, stoppies, rolling stoppies, donuts, hand drags, duanes, cartoon stoppies, tail drags, heel clicks, knee draggins, stand ups, left leg crossovers, stand up wheelies, sit down wheelies, rear peg wheelies, fender grabs, sidesaddle wheelies, high chair wheelies, flamingos, rolling burnouts, crossup burnouts, switchbacks, arches, tank headstands, rolling endos, droppies, christos, reverse christos, leap of faiths, leap of deaths, and any other stunt or activity, known now or in the future, that puts You at risk for injury.

13. Warranty Terms

- Coverage: A 1-year warranty covers defects in materials and workmanship for the bike's components and battery.
- Exclusions: Normal wear and tear, improper assembly, misuse, and unauthorized modifications are not covered.
- Additional Terms: Damage caused by extreme riding, water exposure, or installation of incompatible parts voids the warranty.

Actions that Void Warranty:

- Installation of After-Market Displays: Only original or approved displays should be used with the ebike.
- Attachment of Axle-Mounted Trailer Hitches: This modification can stress the frame and electrical system.
- Electrical System Upgrades: Any modification or tampering with the original electrical system.
- Usage of Aftermarket Saddles: Especially those causing heat buildup and potential damage to controllers.
- Cable Damage: This includes any damages attributable to user error.
- Unauthorized Tire Replacement: All replacements must adhere to approved weight and type guidelines. Moto tires, in particular, have specific requirements.
- Battery and Controller Tampering: Opening or modifying either component in any way.
- Water Damage: This includes riding through deep water or prolonged exposure to heavy rain.
- Overloading: Carrying weight beyond the recommended limit for riders and cargo.
- Improper Storage Conditions: Storing the e-bike in extreme temperatures or without a protective covering.
- Unauthorized Repairs: Utilizing non-approved parts or service providers.
- Improper Charging: Using chargers not recommended by Ariel Rider, or charging in extreme conditions.
- Electronic Manipulation: Tampering with the ebike's electronic settings or firmware.

Components & Issues Not Covered Under Warranty:

- Charge Port Cap for Batteries: Damage to this part is often due to external factors.
- Connection Issues: This includes bent pins in any component, such as the display, controller, motor, or headlight.
- Cross-Threaded Components: Specifically pedals and crank arms.
- User-Caused Damage to Fork Adjustment Knobs: Damage arising from incorrect adjustments or misuse.
- Assembly and Usage Errors: Failures stemming from incorrect assembly or misuse, such as damages due to bumps or impacts.
- Excessive Wear and Tear: Due to lack of proper maintenance or misuse.

Component Wear and Maintenance

- Components such as tires, brake pads, and suspension may experience higher wear due to the bike's power-assisted capabilities.
- Regular inspection and maintenance are critical to prevent failure, which can cause injury or death.
- Users unfamiliar with maintenance should consult a certified bike mechanic.

14. Legal Information

- Users must comply with local laws and regulations governing ebikes.
 - Ariel Rider disclaims liability for injuries, damages, or fines resulting from non-compliance, misuse, or modifications.
 - State-specific requirements for bike operation and safety equipment are detailed, ensuring riders understand their responsibilities.
-

Limited Liability

- Ariel Rider disclaims responsibility for damages or injuries caused by improper use, maintenance, or modifications of the bike.
 - Users assume all risks associated with the operation of the bike, including potential injury or death.
-

Component Lifetime

- Components exceeding their useful life may fail unexpectedly. Signs of wear, such as cracks or changes in performance, indicate replacement is necessary.
- Ariel Rider is not liable for injuries resulting from the use of components beyond their functional lifespan.



When a component exceeds its useful life, it can lead to unexpected failures that pose serious risks, including the potential for severe injuries or even fatalities. Therefore, it is crucial to keep a vigilant eye on all components for any signs of wear and tear. Indicators such as cracks, scratches, discoloration, or noticeable changes in performance can serve as red flags, suggesting that the component may no longer be safe for use. It is imperative that any worn or damaged components are replaced immediately to ensure the safe operation of your equipment.

If you find yourself unsure about how to conduct regular maintenance or if you are unfamiliar with the specific requirements for your bike, it is highly advisable to seek the expertise of a certified and reputable bike mechanic. These professionals possess the knowledge and experience necessary to assess the condition of your bike and its components accurately.

Please note that Ariel Rider cannot be held liable for any damages or injuries that may arise from the use of an Ariel Rider product that contains components which have surpassed their useful life. Your safety is paramount, and it relies heavily on proper care and timely maintenance of your bike. By taking proactive steps to monitor and maintain your equipment, you can significantly reduce the risk of accidents and ensure a safer riding experience for yourself and others. Remember, your safety depends on your diligence in caring for your bike!