NBDA Retailer Advisement

E-Moto two-wheel Electric Vehicles

Introduction

As electric two-wheel vehicles continue to grow in popularity, a new category of high-powered models; without fully operable pedals, powered by electric motors exceeding 750 watts, and capable of speeds over 20 mph is creating concern among policymakers, communities, and the bicycle industry. These vehicles, often referred to as e-motos, are frequently misidentified as e-bikes or electric bicycles, creating public confusion and complicating efforts to develop clear, effective regulations.

This statement is intended to educate NBDA members on best practices related to the sale and service of e-motos, with a focus on risk awareness, compliance, and responsible retail operations. This document was prepared in January 2026 in collaboration with Human Powered Solutions, a bicycle industry consulting and strategy firm. It is intended to provide informed guidance that supports retailer decision-making and the long-term health of the specialty bicycle industry. The landscape is changing rapidly, and this is a living document that will be updated as circumstances require.

Definition

An E-Moto is an electric 2-wheel vehicle that is a compact, battery-powered personal transportation device designed for short- to medium-distance travel. It typically features two wheels arranged in a scooter- or bicycle-like configuration, an electric motor for propulsion, and a rechargeable battery system.

Most current E-Moto offerings are not equipped with working pedals which automatically disqualifies them as a ‘bicycle’ per §16CFR1512.2(a)(2), a regulation issued by the U.S. Consumer Product Safety Commission (CPSC). However, other e-moto vendors may incorporate working pedals in an effort to achieve categorization as a ‘bicycle’ to promote perception of compliance with the mandatory federal regulation. However, propulsion system power ratings

exceeding 750 watts, and/or speed capabilities in excess of 20 mph disqualify these products as 'bicycles' just as effectively as the lack of working pedals.

E-Motos are not considered to be electric motorcycles. For a vehicle to be federally classified as a "motorcycle" (whether electric- or gas-powered), the manufacturer must certify that it complies with all applicable Federal Motor Vehicle Safety Standards (FMVSS) for motorcycles, including for brake systems, lighting, tires, and controls and displays. E-Motos are not so certified nor are they supplied with the required equipment.

E-Moto vehicles are not currently regulated by any governmental agency. Given the lack of appropriate classification nor regulation, the configuration and performance attributes of an e-moto are unrestricted. There are no uniform rider qualification requirements (age, licensing, etc.) nor minimum safety equipment requirements (helmets, eye protection, etc.) currently in effect.

Investigation into the specifications and performance attributes of available e-motos indicates a propensity to disregard current safe engineering practices when designing many of the e-motos currently in the market. For example, brands advertise top speed claims in excess of 35 mph. This is significantly higher than the CPSC speed limit for e-bikes (less than 20 mph) and higher than the top speed restriction of 28 mph for Class 3 ebikes (as defined by People4Bikes and currently in place in numerous states). In fact, social media influencers that test e-motos report top speeds in excess of 65 mph for certain brands and models.

Brand websites selling these vehicles show the electrical system nominal voltage set to 72-volts. This specification violates the maximum 60-volt UL restriction for DC electrical systems in consumer products.

Further, the models studied claim range capabilities up to and exceeding 50 miles. Fifty miles range on a light electric two-wheeler that does not have a provision for human input to extend range must be supplied with a very high capacity lithium-ion battery pack. Considering these batteries do not appear to be UL 2271 or UL 2272 compliant, the safety and integrity of these battery packs must be called into question.

Advertising for these products frequently depicts riders engaging in potentially hazardous and irresponsible behavior. In fact, the motor control functions of a

number of brands include features that can facilitate stunt-style riding. There is growing concern about social media influencers promoting unsafe and illegal riding practices, including high-speed riding while weaving through traffic on busy streets and the unsanctioned use of private property. This contributes to a distorted and dangerous perception of what responsible e-bike and bicycle use should look like.

IMPORTANT GUIDANCE FOR NBDA RETAILER MEMBERS

Protecting Your Business: Understanding E-Moto Related Risks

The NBDA has carefully evaluated the safety and legal considerations associated with e-moto vehicles and wants to help our retailer members make informed decisions that protect their businesses, employees, and customers.

Key Concerns:

- E-Motos currently lack federal safety certification and regulatory oversight
- Design specifications often exceed established safety standards (CPSC speed limits, UL voltage restrictions)
- Non-certified lithium-ion batteries have been associated with fire incidents in other markets
- Some models achieve speeds exceeding 65 mph, creating significant injury risk
- Marketing materials sometimes encourage risky riding practices
- Insurance coverage for these vehicles remains unclear due to their unregulated status

Recommended Steps for NBDA Retailer Members:

1. Consider your risk before stocking, selling, or servicing E-Moto vehicles as defined in this policy statement
2. Educate your staff on how to identify e-motos and explain why your shop has chosen not to work with them
3. Review your current inventory to ensure no products meet the e-moto definition

4. Communicate your policy to customers seeking e-moto sales or service
5. Consult your insurance carrier to understand your coverage regarding these vehicles
6. Keep records of products you decline to service or sell for your files

Understanding Your Risk Exposure

Retailers should be aware of potential concerns including:

- Product liability considerations for accidents involving vehicles sold or serviced
- Facility safety issues if e-motos with questionable batteries are stored on premises
- Employee safety when working on unfamiliar, high-powered vehicles
- Possible insurance coverage gaps for unregulated vehicle categories
- Evolving state and local regulations that may create compliance challenges

E-moto Legislation

PeopleForBikes has released model e-moto legislation that proposes four main strategies to address the e-moto problem: (1) better define these vehicles in state vehicle codes, (2) create regulatory product standards for e-motos, (3) regulate the sellers of e-motos, and (4) educate the public and enforce new and existing laws.

NBDA supports efforts to clearly distinguish e-motos from low-speed electric bicycles in law, including explicit exclusion of high-power, high-speed vehicles from state “electric bicycle” definitions and their treatment as motor vehicles subject to registration, licensing, insurance, and equipment requirements.

If and when states adopt e-moto provisions based on the PeopleForBikes model, these laws may improve clarity for law enforcement, insurance carriers, and the public by:

- Requiring accurate labeling and prohibiting false advertising of e-motos as e-bikes.

- Requiring that e-moto sellers be licensed as motor-vehicle or off-highway-vehicle dealers and comply with registration requirements.
- Directing states to apply applicable Federal Motor Vehicle Safety Standards (FMVSS) and recognized electrical and battery safety standards (e.g., UL 2272 or comparable) to e-motos operated on public roads or off-highway facilities.

However, even with such legislation in place, NBDA's core guidance to specialty bicycle retailers remains unchanged.

Our Recommendation

Until E-Motos receive appropriate regulatory oversight, safety certification, and clear insurance frameworks, the NBDA believes they present both unnecessary business risks for bicycle retailers and unnecessary safety concerns to consumers and the general public. While we understand the appeal of potential new revenue streams, we encourage our members to prioritize the long-term stability and safety of their operations. NBDA will continue to monitor the evolution of e-moto-specific laws and standards, including model policies developed by allied organizations, and may revise this advisement as state and federal frameworks mature.

Need Assistance?

The NBDA is here to support you. Please reach out if you:

- Need help determining whether a specific product qualifies as an e-moto
- Have questions about existing inventory or service commitments
- Want guidance on communicating this policy to customers or suppliers
- Would like to discuss how this impacts your specific business situation

We're committed to helping our members navigate this evolving landscape while protecting the businesses you've worked hard to build.