



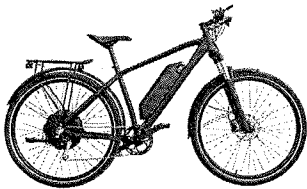
E-Moto vs. E-Bike - Michigan

Understanding the Problem and Crafting Effective Solutions

Electric bicycles (e-bikes) are a widely adopted, legally defined form of transportation that provide affordable, low-speed mobility for people of all ages and abilities. Increasingly, consumers are, often unknowingly, purchasing high-powered electric motorcycles or mopeds that are incorrectly marketed or assumed to be e-bikes. These vehicles are commonly referred to as “e-motos.”

When serious crashes occur, e-motos are frequently mischaracterized as e-bikes, creating confusion for policymakers and the public while undermining legitimate e-bike use.

E-Bike



“Pedal-assist electric bicycle (≤750W)”

1. Traditional bicycle frame
2. Visible pedals and chain
3. Compact motor and battery

E-bikes are legally defined in Michigan (MCL 257.13e) and almost every state using a three-class system and must meet federal safety standards. Across all classes, an electric bicycle must have:

- Operable pedals + seat or saddle
- An electric motor of 750 watts or less
- Motor-assisted speed limited to: 20 mph (Class 1 + 2) or 28 mph (Class 3)
- E-bikes are designed to function as bicycles, rather than motor vehicles, and are regulated accordingly.

- A **class 1** e-bike can be motor-assisted up to 20 miles per hour when pedaling.
- A **class 2** e-bike can also have a throttle to engage the motor without pedaling.
- A **class 3** e-bike can be motor-assisted up to 28 miles per hour when pedaling.

E-Moto



“High-powered electric motorcycle (motor vehicle)”

1. Motorcycle-style frame
2. Bench seat and wide tires
3. Large battery and motor housing

E-moto is a general term for electric mopeds, motorcycles, and dirt bikes that do not meet the legal definition of an e-bike. E-motos are motor vehicles but are often conflated with e-bikes despite having vastly different performance and risks.

Common e-moto characteristics include:

- Motors ranging from 1,000 to 6,000+ watts
- Top speeds of 30 to 65 mph
- Fake or non-functional pedals, or no pedals
- Weights often exceeding 100 pounds
- Bench-style seats, “moto-style” open frames, and large battery systems

E-Moto Risks

Many buyers reasonably assume that any product marketed as an “e-bike” is low-speed and appropriate for youth. Misleading marketing and inconsistent regulation allow high-powered electric motorcycles to be sold as e-bikes both in stores and online, often without clear warnings that they are motor vehicles. Parents may unknowingly purchase an unregistered motor vehicle for their child.