



Accelerate Indiana
Municipalities

MINI QUICK GUIDE: THE DIFFERENCES BETWEEN E-BICYCLES AND E-MOTORCYCLES

OVERVIEW

While communities don't actually need an ordinance to enforce the regulation of e-motorcycles (e-motos), some citizens struggle to understand where e-motos fall: are they motor vehicles or e-bikes? This Mini Quick Guide will explain how to determine the differences between e-bikes and e-motos, and what these differences mean in terms of local regulation and enforcement.

E-BIKES

E-bikes are categorized as being either Class 1, 2, or 3, and they are legally treated as bicycles.

The definitions of each e-bike class are:

- Class 1 e-bikes have an electric motor using 750 watts or less, a maximum assisted speed of **20 mph**, and are pedal assist only. There is no throttle. [IC 9-13-2-26.6](#) defines a Class 1 electric bicycle.
- Class 2 e-bikes have an electric motor using 750 watts or less, a maximum assisted speed of **20 mph**, and are pedal assist and have a throttle so they can be ridden without pedaling. [IC 9-13-2-26.7](#) defines a Class 2 electric bicycle.
- Class 3 e-bikes have an electric motor using 750 watts or less, a maximum assisted speed of **28 mph**, and are pedal assist only. There is no throttle. [IC 9-13-2-26.8](#) defines a Class 3 electric bicycle.

If a bike with an electric motor does not fit into one of these definitions, then it is not an e-bike and is considered a motorized vehicle.

The use and authorized locations where e-bikes can be ridden can be found in [IC 9-21-11-13.1](#). Subsection (f) of the same statute also requires legal e-bikes to have a data plate or sticker listing the following:

1. The class level of the e-bike
2. The top assisted speed of the e-bike.
3. The rated wattage of the e-bike's electric motor.

E-MOTOS

E-motos that don't meet the legal definition of e-bikes are treated as motor vehicles under [IC 9-13-2-105](#), and subject to all motor vehicle requirements, such as VIN numbers and license plates.

Further, e-motos are not class A or B motor driven cycles (i.e. scooters) because the definition excludes any electric motorcycle (IC 9-13-2-104.1). Many e-motos are 5000+ watts, which is ~7+hp. A 50cc moped engine is around 2-4 horsepower.

MUNICIPAL POLICE DEPARTMENTS

Factors to consider:

- **Speed** – Speed is a way to separate motor vehicles driven on sidewalks without a license, insurance, or registration from a legal e-bike. It may be impractical to get a radar gun or write tickets for e-bikes that appear to be going close to the lawful limit, but if an officer sees someone going 45+mph on a sidewalk or trail or one of these passes in front of a calibrated speedometer, it's obviously not an e-bike regardless of what any sticker says or if it has pedals.
- **Motorcycles** – Whether a motorcycle is gas or electric powered, the operator is required to be licensed, and the motor vehicle should be registered, and insured. E-motos are increasingly something for law enforcement and municipal leaders to carefully monitor. Parents often think these are legal (akin to e-bikes) because they do not have a gas engine, but Indiana law does not differentiate between gas or electric motorcycles. E-motos are often capable of 50mph+ speeds.
- **Pedals** – The easiest way to quickly identify an e-moto requiring a license, registration and insurance is by looking for pedals. If a 2-wheel cycle does not have pedals, it is a **motorcycle**. (Common brands of e-motos are Surron, Talaria, Tuttio, E-Ride, Rawrr Mantis, and others).

Using pedals to distinguish e-bikes from e-motos is a fail-safe way to begin enforcement without reading motor wattage labels or searching for information about a particular e-bike or e-moto. Visual speed

estimation (the difference between 30 and 50 mph is quite apparent) also can identify a violator.

INFORMATION TO SHARE WITH COMMUNITY MEMBERS

E-bike Legal Rights and Responsibilities

- E-bikes and Class A and B moto-driven vehicles (scooters) have the same legal rights and responsibilities as bicycles, and are allowed on “any road, path or way that is open to bicycle travel.” This means they can be ridden on roads (except limited access highways), bike lanes, bike paths, multi-use paths, and sidewalks.
- They must follow all traffic laws, including riding with traffic and obeying traffic signals and as authorized by the rules of the paths or trails.
- It is recommended riders always wear a helmet regardless of age

Some Specific Rules of the Road For E-bike Users

- You must yield the right-of-way to pedestrians.
- You must give an audible signal when passing pedestrians. It can be a bell, a horn, or a verbal warning.
- Riders are required to obey all traffic laws, including riding with traffic and following traffic signals and signs, and speed limits.
- You are required to come to a complete stop at a stop sign; this means bringing your e-bike to a full halt before entering the intersection.
- Use lights when riding in low-light conditions and wear bright or reflective clothing.
- For your safety, always yield to traffic when entering an intersection or when passing a driveway.
- E-bikes and e-scooters can cause severe injury when at high speeds. Give yourself the appropriate amount of time to slow down.

For Parents

- Speed has a direct relationship with the severity of injuries in crashes. Parents should consider purchasing a speedometer for e-bikes & e-scooters.
- Know before you buy – An e-moto is not a bike. They are not street legal and cannot be ridden on sidewalks.

This is not legal advice, just recommendations and guidance for safety. Consult your equipment safety guides and your insurance company.

