

Electric Bicycle Presentation

Prepared by APD Sergeant David Noll



Which Electric Bicycles are allowed on bike paths and other pathways in the Municipality of Anchorage?



Where Can an E-Bike be Ridden?

1. A low-speed E-Bike can be ridden:
 1. Anywhere a normal bicycle can go
 2. Pathways such as the Coastal Trail
 3. Bicycle lanes
 4. Sidewalks (not in the central business district)
 5. Subject to pedestrian rules at an intersection
 6. Reasonable and prudent speed

Where Can an E-Bike be Ridden?

1. A high-speed E-Bike CANNOT be ridden:
 1. In any MOA park or recreation area
 2. On any sidewalk, bike path or recreational trail
 3. Bicycle Lanes
2. A high-speed E-Bike CAN be ridden:
 1. On roads, subject to motor vehicle restrictions
 2. With a valid driver's license and M2 (motorcycle) endorsement

Definitions (AMC9.04.010):

1. *Low-speed electric bicycle* means any bicycle or tricycle **with fully operable pedals**, an electric motor of **no more than 750 watts** (1 h.p.), **and** a maximum speed on a paved level surface, when powered **solely** by such a motor and when carrying one person weighing 170 pounds, of no more than 20 miles per hour. For purposes of this title, low-speed electric bicycles are not motor vehicles or motor-driven cycles.

Definitions (AMC9.04.010):

2. *High-speed electric bicycle* means any bicycle or tricycle **with fully operable pedals**, an electric motor of **more than 750 watts** (1 h.p.), **and** a maximum speed on a paved level surface, when powered **solely** by such a motor and when carrying one person weighing 170 pounds, **of more than 20 miles per hour**. For purposes of this title, high-speed electric bicycles are motor-driven cycles.

Definitions (AMC9.04.010):

3. *Motor-driven cycle* means any motorcycle, motor scooter, moped or bicycle with a 50cc or smaller engine displacement motor attached or producing less than five brake horsepower, *or any high-speed electric bicycle.*

Definitions (AMC9.04.010):

4. *Motor vehicle* means every vehicle which is self-propelled and every vehicle which is propelled by electric power obtained from overhead trolley wires, but not operated upon rails. For purposes of this title, *low-speed electric bicycles are not motor vehicles.*

How can APD differentiate between high and low speed E-Bikes?

- It can be difficult to tell a high-speed E-Bike from a low-speed E-Bike when in motion
- No pedals equates to high-speed E-Bike if over 750 watts
- If an E-Bike has pedals, an officer would have to inspect the E-Bike for motor size AND the ability to power itself independent of the pedals

How can APD differentiate between high and low speed E-Bikes?

- Motor size is sometimes listed on a label on the bike (this is an industry standard that most reputable manufacturers adhere to)
- Motor size can also be determined by looking up the make and model (if known) on the manufacturer's website

Example of Label:



How can APD differentiate between high and low speed E-Bikes?

- In addition to motor size, an officer would have to establish that the E-Bike has a standalone/independent throttle with which the E-Bike can be propelled without human power.

Example of Independent Throttle (Thumb Lever):



Example of Independent Throttle (Twist-Grip):



Example of Drop Post Lever (Not a throttle):



APD Encounters:

APD has encountered E-Bikes involved in collisions. One such event resulted in a fatality and the motor size (500 watts) was clearly marked on the bicycle frame.

Despite having an independent throttle (Twist-Grip), the motor size qualified this as a low-speed electric bicycle.



Potential APD Encounters:

1. Agency Assist – Chugach State Park
2. APD could potentially encounter E-Bikes regarding citizen complaints of reckless riding behavior on pathways.

What E-Bikes Are Popular in Anchorage?

1. According to Cary Shiflea, Founder of Alaska eBike Store, about 90% of E-Bikes sold by this company are classified as low-speed electric bicycles without an independent throttle.
2. 10% or less of E-Bikes are sold with an independent throttle, mostly to mobility impaired individuals.
3. About 4-5 E-Bikes per year are special ordered in excess of 750 watts with an independent throttle, and those clients must sign a waiver.



Questions?

David M Noll

Police Sergeant

Supervisor: Traffic Unit;

Major Collision Investigation Unit

