



USA Cycling E-Bike Policy

Why:

USA Cycling recognizes this fast-growing part of the bicycle industry has increased recreational enjoyment of the sport of cycling, and for many who seek to return to or find a new and fun form of bike riding and racing.

Some Event Directors may wish to include e-bikes in their events. We are creating this policy to include e-bikes in USA Cycling permitted events to ensure base level controls of equipment and the best events possible:

What:

The federal Consumer Product Safety Act defines a "low speed electric bicycle" as a two or three wheeled vehicle with fully operable pedals, a top speed when powered solely by the motor under 20 mph (32 km/h) and an electric motor that produces less than 750 W (1.01 hp). The rules for e-bikes on public roads, sidewalks, and pathways are under state jurisdiction, and vary.

Electric bikes for competition are known as "pedelecs" or pedal electrics. The bike utilizes pedaling and electric power. Pedelecs come in many varieties and power outputs and most are listed as classes of e-bikes. The Consumer Products Safety Council has created their definition and generically, for USA Cycling e-bike events, the following Class 1 e-bike definition is adopted*:

- No throttle
- Freely operable pedaling system: rear wheel drive train of pedals, crank, chain and gear system.
- 750 watt or less motor (manufacturer's label of compliance is the minimum standard)
- Motor engages only with pedaling
- Motor assistance cut off at 20 mph (32 kmh)

Additionally, the following options for e-bikes in regulated competitive events, are allowable.

- A single battery
- Limited start assist (no pedaling) up to 4 mph (6 kmh)

**Many US States have differing regulations regarding e-bikes. No USA Cycling definition or regulation supersedes existing State or Federal Regulations.*

Where:

It is important to note that the event organizer must ensure that e-bikes are allowed under local, state and federal regulations within the venue where the event takes place. USA Cycling's regulations do not allow e-bikes where they are otherwise prohibited.



How:

Race organizers are free to decide if and when they want to include **e-bike** competitions in any of their events. There is no mandate to conduct e-bike competitions, rather this policy strives to set forward best practices for conducting them.

- **Enforcement** of regulations and policies for e-bikes in the following groups should be in proportion to the level of competition and reward. Is this a “fun competition” without monetary prizes or a competition with simple bragging rights? Come have fun! is all you may need or perhaps a simple verification of the manufacturer’s labeling (Class 1) is sufficient. For more competitive events, you’ll see more verification suggestions following them.

Fun rides, as permitted by USA Cycling, are free to allow e-bikes as a part of their overall experience without any restrictions or restrictions as they see fit. Remember to assure that e-bikes are allowed on all portions of your proposed course (streets, trails, bike paths).

Mass participation rides, such as **Grand Fondos** and **Gravel Grinders** with e-Bike events, should have e-bikes as a separate start wave so that all riders have a clear idea of who is in their group. Considering there is a mechanical advantage given, results for this group or class should be clearly identified and separated from the remainder of the participants, so everyone has fun and respects the efforts of each type of entrant.

Competitive e-bike events need to be stand-alone events, or when part of a larger competitive events, separate categories or classes, to protect the integrity of all competitions. No mixing of normal cycling and motor assisted competitive cycling is allowed. Organizers who wish to conduct e-bike events should clearly advertise them as such and must limit the opportunity for motorized and non-motorized competitions to occur on the same course at the same time. This may require separate course or portions of courses to avoid any overlap between competition types.

- **Courses.** Consideration should be given to the e-Bike course design to encourage access to competition without putting athletes into situations that are extreme and accessible solely because of additional power and range an e-bike may offer. Courses that are simply flat and offer opportunities to reach and maintain maximum pedal assist speeds are not suggested.
- **Results.** Separate results, clearly identifiable as e-bike competition results, are required.
- **Verification** and checking of equipment is a key component of “Safe, Fun and Measured” for equitable USA Cycling competitive events. The more serious the competition, as with all cycling events, competitors want to know that they are on equal footing in terms of equipment. Verification of equipment should be a serious consideration for e-bike events meant to be competitive and offer prizes. The following verification details are a range of the possible verification and testing requirements the race director may implement through planning and pre-race notification/advertising. Verification requires additional personnel and organizational infrastructure to implement successfully.



- **Pre-race inspections** (a holding area or corral is needed to hold checked bicycles until the start time). Possible levels of inspection:
 - Verification of manufacturer’s label,
 - Verification of no throttle,
 - Review of pedaling action
 - Measurement of wheels and rear wheel speed sensor by a factory representative to verify speed cut-off assistance
 - Motor output verification by a tech or factory representative
- **Post-race inspections** (a holding area or corral is needed through inspection and results protest period.)
 - Inspect/hold the number bikes equaling the placing/prizes plus 1,
 - Inspections same as pre-race,
 - Top speed cut-off test (riding GPS speed test performed by tech)

Mixed use of e-bike equipment:

Again, race directors control how and when e-bikes are used in their events and can always create special regulations regarding equipment use. Where allowed, competitors are urged not to utilize incapacitated e-bikes in standard USA Cycling competitions, for nothing else than to legitimize the efforts of e-bike competition and non e-bike competitions. As these e-bikes have a readily apparent visual appearance, the opportunity for misinformation and negative media is extremely high. In scenarios where someone does wish to utilize an incapacitated e-bike in athletic event, it shall be the responsibility the participant to fully demonstrate that the e-bike has no battery and therefore no ability to be operated as an e-bike. For Mountain Bike events where the Event Organizer wants to tolerate mixed-use e-bike equipment, the participant shall check in with the start or staging official with enough time for an inspection to be made and the rider’s equipment to be verified an inoperable e-bike.

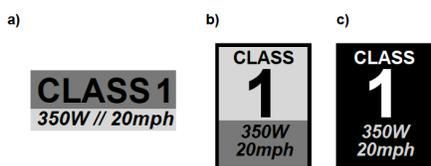
WHAT YOU NEED TO KNOW ABOUT THE eBIKE CLASSIFICATION & LABELING (CSPC):
SECTION 1, Section 312.5

(a) An “electric bicycle” is a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts.

(1) A “class 1 electric bicycle,” or “low-speed pedal-assisted electric bicycle,” is a bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

EXAMPLE OF GENERIC CLASS LABELS

CLASS 1: 350W // 20MPH





UCI Mountain e-bike events:

The EU defines electric bicycles as “Cycles with pedal assistance which are equipped with an auxiliary electric motor having a maximum continuous rated power of 0.25 kw, of which the output is progressively reduced and finally cut off as the vehicle reaches a speed of 25km/h (15.5mph) or if the cyclist stops pedaling.”

The UCI has mandated standards for e-Bikes used in competitions held under its sanction. The following regulations differentiate e-bikes allowed in UCI events:

- Engine maximum continuous rated power of 250 watts
- Pedaling assist motor engagement only, although a start-up assistance not exceeding 6kmh, without pedaling is allowed
- Engine assistance up to 25kmh
- Additional batteries may not be carried

- **Verification** and checking of equipment is mandatory for UCI e-bike mountain bike events. The following list explains some of the controls likely to take place in a UCI e-bike competition. Verification requires additional personnel and organizational infrastructure to implement successfully. The exact time of each bike control must be communicated to each rider after the rider’s on-site completed registration.
 - **UCI Pre-Race Checks** (a holding area or corral is required to check and hold checked bicycles until the start.)
 - Inspect battery
 - Perform engine diagnostic check
 - Search for non-factory modifications (Tuning kit)
 - Rear wheel rollout measurement (including any reserve wheels). A maximum tolerance of 5% difference between actual wheel rollout and wheel values for motor settings is allowed.
 - Mark inspected battery and wheels with tamper proof stickers
 - After this check, batteries can be removed but bikes won’t be allowed to leave this area. Each marked battery must be replaced no later than 30 minutes before the scheduled start. Checked bikes may not be picked up earlier than 15 minutes before the start.

 - **Post-race checks.** The top riders of each category and randomly selected bikes will be taken directly to the control after the finish for re-inspection.
 - Inspect/hold the number bikes equaling the placing/prizes plus 1,
 - Inspections same as pre-race,
 - Top speed cut-off test (riding GPS speed test performed by tech)