



El Segundo Police Department

Training Section

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TRAINING BULLETIN

April 17, 2024

Electric Bicycles

Classification, Definitions, and Enforcement

ELECTRIC BICYCLE (CLASS 1, 2, 3): Electric bicycles are bicycles equipped with operable pedals and assisted by an electric motor of less than 750 watts.

Class 1: A “class 1 electric bicycle” provides electric assistance only when the rider is pedaling, but ceases to provide assistance when the electric bicycle reaches 20 miles per hour (MPH).

Class 2: A “class 2 electric bicycle” may be run solely off the electric motor, but ceases to provide power when the electric bicycle reaches 20 MPH.

Class 3: A “class 3 electric bicycle” provides electric assistance only when the rider is pedaling, but ceases to provide assistance when the electric bicycle reaches 28 MPH (CVC Section 312.5).

- Equipped with a speedometer
- Must wear a helmet
- Must be 16 or older
- Prohibited from Class 1 multi-use bike paths (ex. beach bike path)

24016 (a) CVC- An electric bicycle described in subdivision (a) of Section 312.5 shall meet the following criteria:

(1) Comply with the equipment and manufacturing requirements for bicycles adopted by the United States Consumer Product Safety Commission (16 C.F.R. 1512.1, et seq.).

(2) Operate in a manner so that the electric motor is disengaged or ceases to function when the brakes are applied or operate in a manner such that the motor is engaged through a switch or mechanism that, when released or activated, will cause the electric motor to disengage or cease to function.

(c) Every manufacturer of an electric bicycle shall certify that it complies with the equipment and manufacturing requirements for bicycles adopted by the United States Consumer Product Safety Commission (16 C.F.R. 1512.1, et seq.).

(d) A person shall not tamper with or modify an electric bicycle described in subdivision (a) of Section 312.5 so as to change the speed capability of the bicycle, unless he or she appropriately replaces the label indicating the classification required in subdivision (c) of Section 312.5.

(Amended by Stats. 2015, Ch. 568, Sec. 7. (AB 1096) Effective January 1, 2016.

ENFORCEMENT VIOLATIONS (ELECTRIC BICYCLES)

21207.5(a) CVC – BIKE PATH - a motorized bicycle or class 3 electric bicycle shall not be operated on a bicycle path or trail, bikeway, bicycle lane established pursuant to Section 21207, equestrian trail, or hiking or recreational trail, unless it is within or adjacent to a roadway or unless the local authority or the governing body of a public agency having jurisdiction over the path or trail permits, by ordinance, that operation.

21213(a) CVC – MINOR - A person under 16 years of age shall not operate a class 3 electric bicycle.

21213(b) CVC – HELMET - A person shall not operate a class 3 electric bicycle, or ride upon a class 3 electric bicycle as a passenger, upon a street, bikeway, as defined in Section 890.4 of the Streets and Highways Code, or any other public bicycle path or trail, unless that person is wearing a properly fitted and fastened bicycle helmet that meets the standards of either the American Society for Testing and Materials (ASTM) or the United States Consumer Product Safety Commission (CPSC), or standards subsequently established by those entities. This helmet requirement also applies to a person who rides upon a class 3 electric bicycle while in a restraining seat that is attached to the bicycle or in a trailer towed by the bicycle.

312.5(c) CVC – CLASSIFICATION - On and after January 1, 2017, manufacturers and distributors of electric bicycles shall apply a label that is permanently affixed, in a prominent location, to each electric bicycle. The label shall contain the classification number, top assisted speed, and motor wattage of the electric bicycle, and shall be printed in Arial font in at least 9- point type.

24016(d) CVC – MODIFY - A person shall not tamper with or modify an electric bicycle described in subdivision (a) of Section 312.5 so as to change the speed capability of the bicycle, unless he or she appropriately replaces the label indicating the classification required in subdivision (c) of Section 312.5.

ENFORCEMENT VIOLATIONS (BICYCLES AND ELECTRIC BICYCLES)

8-4-19 ESMC – OPERATE - No persons shall ride, drive or propel, or cause to be ridden, driven or propelled into or upon any roadway, path or way in any public park or recreation ground within the city any vehicle, device or other equipment, including a bicycle.

21200(a)(1) CVC – OPERATION - A person riding a bicycle or operating a pedicab upon a highway has all the rights and is subject to all the provisions applicable to the driver of a vehicle by this division, including, but not limited to, provisions concerning driving under the influence of alcoholic beverages or drugs. Must follow traffic signals, obey speed limits, and stop at stop signs.

21650.1 CVC – OPERATION - A bicycle operated on a roadway, or the shoulder of a highway, shall be operated in the same direction as vehicles are required to be driven upon the roadway.

21202(a) CVC – OPERATION - Any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicable to the right-hand edge of the roadway, except when overtaking and passing another bicycle or vehicle.

21208(a) CVC – BIKE LANE - Whenever a bicycle lane has been established on a roadway, any person operating a bicycle upon the roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride within the bicycle lane. Movement out of the bicycle lane is permitted to make a turn or to pass another bicycle, vehicle, or pedestrian within the lane.

21208(b) CVC – BIKE LANE - No person operating a bicycle shall leave a bicycle lane until the movement can be made with reasonable safety and then only after giving an appropriate signal in the manner provided in Chapter 6 (commencing with Section 22100) in the event that any vehicle may be affected by the movement.

21212(a) CVC – HELMET - A person under 18 years shall not operate or be a passenger on a bicycle without an approved bicycle helmet.

MOTORIZED BICYCLES: (Two Definitions) A motorized bicycle or moped is either:
Definition: 406(a) CVC - Any two-wheeled or three-wheeled device having fully operative pedals for propulsion by human power or having no pedals if powered solely by electrical energy, equipped with an automatic transmission and motor which produces less than 4 gross brake horsepower and a maximum speed of not more than 30 miles per hour on level ground. A motorized bicycle is subject to applicable rules of the road and collision reporting requirements.

OR

Definition: 406(b) CVC – A device that has fully operative pedals for propulsion by human power and has an electric motor that has a power output of not more than 1,000 watts, a maximum speed of not more than 20 MPH on level ground, and is incapable of further increasing the speed when human power is used to propel the device faster than 20 MPH.

Definition 406(a) CVC – ENFORCEMENT VIOLATIONS

12500(a) CVC – LICENSE - (406(a) CVC Definition) A valid driver's license is required.

12500(b) CVC – MOTORCYCLE ENDORSEMENT - (406(a) CVC Definition) A M2 motorcycle endorsement is required (per 12804.9(b)(5) CVC). (Exemption: A "short-term" moped rental of 48 hours or less does not require an M2 endorsement (per 12804.9(h) CVC).

5030 CVC – REGISTRATION - (406(a) CVC Definition) Must have and display a special license plate issued by the DMV. (It shall bear a distinctive number to 13 identify the motorized bicycle for which it is issued and shall bear a symbol, letter, or word to distinguish license plates issued under this article from license plates issued for motorcycle and motor-driven cycles. The owner, upon being issued a license plate, shall attach it to the motorized bicycle for which it is issued and shall carry the identification card issued by the department (per 5035 CVC).

5037(a) CVC – Registration - No motorized bicycle first sold on or after July 1, 1981, shall be moved or operated upon a highway unless the owner first makes application for a license plate and, when received, attaches it to the motorized bicycle.

16028(a) CVC – INSURANCE - (406(a) CVC Definition) required (per 16020(a) CVC).

27803(b) CVC – HELMET - (406(a) CVC Definition) Operator or any passenger must wear a motorcycle safety helmet. (A "safety helmet" must meet the requirements of 27802 CVC on the person's head that is fastened with the helmet straps and that is of a size that fits the wearing person's head securely without excessive lateral or vertical movement (per 27803(e) CVC).

24015(a) CVC – EQUIPMENT - Motorized bicycles shall comply with those federal motor vehicle safety standards established pursuant to Chapter 301 (commencing with Section 30101) of Part A of Subtitle VI of Title 49 of the United States Code that apply to a motor-driven cycle, as that term is defined in regulations adopted pursuant to those provisions. These standards include, but are not limited to, provisions requiring a headlamp, taillamp, stop lamp, side and rear reflex reflectors, and adequate brakes.

24015(b) CVC – EQUIPMENT - In addition to equipment required in subdivision (a), all motorized bicycles operated upon a highway shall be equipped with a mirror as required in subdivision (a) of Section 26709, a horn as required in Section 27000, and an adequate muffler as required in subdivision (a) of Section 27150.

REFERENCE CHART

CALIFORNIA	Vehicle		User				Bike Access			
	Pedal Operated	Max Assisted Speed	Minimum Age (yrs)	Driver's License	License Plate	Helmet	Class 1 Bike Path	Class 2 Bike Lane	Class 3 Bike Route	Class 4 Protected Lane
BICYCLE	YES	N/A	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 1 EBIKE	YES	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 2 EBIKE	NO	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 3 EBIKE	YES	28	16	NO	NO	YES	NO	YES	YES	YES
MOPED	NO	N/A	16	YES	YES	YES	NO	YES	YES	NO

Commonly Seen Illegal Electric Bicycles

- Talaria



- SurRon



These companies advertise their bicycles as off-road use only and the rider must be 16 years of age or older. These electric motors are greater than 750 watts which does not classify them as electric bicycles.

Enforcement Actions:

- Do NOT tow. Have the rider either park the bike and have someone pick them up or have them walk it home. If a juvenile is stopped, contact a parent and have them pick up the bike. If no one is available to pick up the bike, you may take the bike for safe keeping.

Legal Electric Bicycles:

- 312.5(c) CVC: On and after January 1, 2017, manufacturers and distributors of electric bicycles shall apply a label that is permanently affixed, in a prominent location, to each electric bicycle. The label shall contain the classification number, top assisted speed, and motor wattage of the electric bicycle, and shall be printed in Arial font in at least 9- point type.

Examples of properly marked electric bicycles:

