

What is a Vehicle?

- CVC 670 A "vehicle" is a device by which any person or property may be propelled, moved, or drawn upon a highway, except a device moved exclusively by human power or used exclusively upon stationary rails or tracks.
- CVC 415 (a) A "motor vehicle" is a vehicle that is self-propelled.
 - (b) "Motor vehicle" does not include a self-propelled wheelchair, motorized tricycle, or motorized quadricycle, if operated by a person who, by reason of physical disability, is otherwise unable to move about as a pedestrian.
 - (c) For purposes of Chapter 6 (commencing with Section 3000) of Division 2, "motor vehicle" includes a recreational vehicle as that term is defined in subdivision (a) of Section 18010 of the Health and Safety Code, but does not include a truck camper.

What is the CVC Definition of Electric Vehicle?

• CVC ???

What is an Electric Vehicle?

• There is no CVC definition of "Electric Vehicle" which means it falls under the same definition as "Vehicle" under CVC 670.

What's the difference.

Zero SR/S

Acceleration: 0-60mph less than 3.5 seconds

Top speed: 124 mph



Tesla Model 3

Acceleration: 0-60mph 4.2 seconds

Top speed: 145 mph



What's the difference.

Zero SR/S

Acceleration: 0-60 mph less than 3.5 seconds

Top speed: 124 mph



Sur-Ron X

Acceleration: 0-60 mph approx. 6.8 seconds

Top Speed: 47 – 75 mph Recent modifications allow for operation up to 100 mph.



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Sur-Ron X

Acceleration: 0-60 mph approx. 6.8 seconds

Top Speed: 47 – 75 mph. Recent modifications allow for operation up to 100 mph.

KTM 150 SX

Acceleration: 0-60 mph approx. 8.9 seconds

Top Speed: 73 mph





1.) Motorcycle

6.) Motorized Scooters

2.) Motor-Driven Cycle

3.) Moped/ Motorized Bicycle

4.) Bicycle

5.) Electric Bicycle

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- 2.) Motor-Driven Cycle
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 NOT a "Cycle" but equally important...

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WHAT IS A MOTORCYCLE?

CVC section 400 defines a motorcycle as:

- A vehicle whose motor displaces 150 cubic centimeters (CC's) or more
- Has a seat or saddle for the use of the rider
- Is designed to travel on not more than three wheels in contact with the ground.

• **NOTE:** Can be powered by electric motor, *speed* is the most important factor to determine class. Watts (POWER) comes in close second.

WHAT IS A MOTOR-DRIVEN CYCLE?

CVC section 405 defines a motor-driven cycle as:

- Any motorcycle with a motor that displaces less than 150cc.
- A motor-driven cycle does not include a motorized bicycle as defined in section 406.

- NOTE: Most 150 cc engines can reach speeds of 40 to 70 mph.
- **NOTE:** Can be powered by electric motor.
- CVC is same as Motorcycle including license, registration, insurance, and rules of the road requirements.







WHAT IS A POCKET BIKE?

- Is considered a motor-driven cycle, but is not permitted on public roadways, bicycle paths, sidewalks, bikeways or recreational trails. **CVC 21720.**
- It is designed and built for use on paved close circuit track for racing competitions.
- CVC 24002 Unlawful to operate any vehicle which is in an unsafe condition which presents an immediate safety hazard.







WHAT IS A MOPED/MOTORIZED BICYCLE?

CVC section 406(a) define a moped or motorized bicycle as:

 "Motorized Bicycle" or "Moped" is any two or three wheeled device having fully operative pedals for propulsion by human power, or having no petals if powered solely by electrical energy, has an automatic transmission, a motor that produces less than 4 HP, and is capable of propelling the device at a maximum speed of <u>not more</u> <u>than 30 mph.</u>







WHAT IS A BICYCLE?

CVC sections 231 and 39000 defines a bicycle as:

- Any device upon which a person may ride, which is propelled by human power
- Through a system of belts, chains or gears
- Having either two or three wheels (one of which is at least 20 inches in diameter), or having four or more wheels.

WHAT IS AN ELECTRIC BICYCLE?

- CVC section 312.5 defines an electric bicycle:
- "Electric bicycle" is a bicycle equipped with fully operative pedals and an electric motor of less than 750 watts.
- Class 1: "low-speed *pedal-assisted* electric bicycle" max *assist* speed **20** mph.
- Class 2: "low-speed <u>throttle-assisted</u> electric bicycle" max <u>throttle</u> speed 20 mph.
- Class 3: "speed <u>pedal-assisted</u> electric bicycle" max speed <u>assist</u> 28 mph. Must be equipped with a speedometer. Must be 16 year of age or older to operate. Has no throttle. Bicycle helmet required at any age.

WHAT IS A MOTORIZED SCOOTER?

CVC section 407.5 defines a motorized scooter as:

- A two wheeled device that has handlebars
- Is designed to be **stood upon** by operator, can have seat.
- Is powered by *either* electric or gas motor







Unique Motorized Scooter restrictions CVC 21235(b) - Restricted to 25 mph roadway, Class II or Class IV bike lanes.





Class II - Standard Bike Lanes (Class II) are lanes for bicyclists adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Bike lanes can be enhanced with green paint or a buffer. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.

<u>Unique Motorized Scooter restrictions</u> CVC 21229 – Must ride in Class II bike lane when established.





Class IV - Cycle Tracks (Class IV) provide a right-of-way designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices, including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars.

Off Road Use

CVC section 38012(b)(1) defines "off highway motor vehicles" to include, but is not limited to:

• A motorcycle, or motor-driven cycle.

NOTE: For registration requirements and license plates. What is the rider's intention? Does the vehicle have proper lighting equipment to operate on a public roadway?

- CVC 38026.5(b) Operate off-highway vehicle on public roadway.
- OMC 12.48.070(A) No Motor vehicles or Motorized Bicycles on Bike Trail.

How to make a dirt bike California Street Legal

- MUST meet California emissions standards: EPA Sticker from manufacturer or CARB permit.
- MUST have following Equipment:
 - Headlight(s) (CVC 25650.5)
 - Tail lights/ Stop lamps (CVC 24600/ 24603)
 - Blinkers (CVC 24951)
 - Mirrors (CVC 26709)
 - Reflectors (CVC 24607, 24608, 24609)
 - Horn (CVC 27000)
 - License plate mount/ light (CVC 24601)
 - Speedometer
 - DOT approved tires (CVC 27451)
 - DOT approved exhaust (CVC 27150)
 - License plate (CVC 5200)

EV and DUI

- CVC 23152
 - Motorcycle
 - Motor-Driven Cycle
 - Moped/ Motorized Bicycle
- CVC 21200.5
 - Bicycle
 - Electric Bicycle
- CVC 21221.5
 - Motorized Scooter

| | Motorcycle | Motor-Driven Cycle | Moped/ Motorized Bicycle | Electric Bicycle | Bicycle | Motorized Scooter |
|--|---------------------------|------------------------------|---|---|------------------------------|------------------------------|
| Speed Limitations | None. | 40-70 mph | 30 mph | Class 1: 20 mph Class 2: 20 mph Class 3: 28 mph | None. | 15 mph |
| CC or Watt Limitations | <150 CC Engine Unl. Watts | >150 CC Engine <750 Watts | >60 CC Engine <750 Watts | 750 Watts | N/A | Not Specified |
| Engine/ Motor Type | Gas or Electric | Gas or Electric | Gas or Electric | Electric and Human Powered | Human Powered | Gas or Electric |
| Registration/ License plate required | Yes | Yes | Yes | No* | No* | No |
| VIN or S/N | VIN | VIN | VIN | S/N | S/N | S/N |
| Minimum License Requirements | CM1 | CM1 | CM2 | None | None | С |
| CVC Sections | Same as Vehicle | Same as Vehicle | Same as Vehicle/ some Bicycle Sections. | Same as Bicycle | Specific Bicycle Sections | Specific Scooter Sections |

