

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

SECOND MODIFIED TEXT OF REGULATIONS

TITLE 13, CALIFORNIA CODE OF REGULATIONS,
DIVISION 2, CHAPTER 4, ADD ARTICLE 13, TIRE TRACTION DEVICES,
SECTIONS 1070-1074

Tire Traction Devices (CHP-R-2014-03)

Existing text:Times New Roman 12 point font.
Additions:Times New Roman 12 point font with single underline.
Deletions:~~Times New Roman 12 point font with single strikethrough.~~
First Modified Additions:Times New Roman 12 point font with double underline.
First Modified Deletions:~~Times New Roman 12 point font with double strikethrough~~
Second Modified Additions:**Times New Roman 12 point bold font with double underline.**
Second Modified Deletions:~~**Times New Roman 12 point bold font with double strikethrough**~~

Article 13. Tire Chains Traction Devices

§ 1070. Scope. This article applies to tire traction devices as defined by Vehicle Code Section 605 and required by Vehicle Code Section 27459 to be used under certain conditions of snow ~~or~~ and ice on the highway.

Note: Authority cited: Section 26103, California Vehicle Code. Reference cited: Sections 21461, 24006, 26103, 26104, 27459 and 27459.5, ~~California~~ Vehicle Code.

§ 1071. Definitions.

- (a) Alternative Tire Traction Device (ATTD ATD) is a tire traction device which differs from ~~conventional~~ tire chains in construction, design, or material, ~~including textile traction devices.~~ The ATTD ATD is capable of providing traction equal to or exceeding the performance of ~~metal~~ tire chains or tire cables under similar conditions. Examples of ATDs include, but are not limited to: automatic tire chains, textile traction devices, and wheel-hub attached chains, provided they meet or exceed the regulatory standards for tire chains or tire cables as provided by this article.
- (b) Automatic tire chain is a device, not directly mounted on a tire, which ~~through automation places~~ a driver may manually activate using a switch from inside the vehicle

to automatically position a ~~portion~~ strand of chain between the tire and roadway. These devices may also be referred to as "on-demand" chains.

(c) Official traffic control device shall have the same meaning as Vehicle Code Section 440.

(ed) Snow-tread tires, commonly referred to as mud and snow tires, are pneumatic tires which have a relatively deep and aggressive tread pattern compared with conventional passenger tread pattern. Snow-tread tires may be identified using the following manufacturer markings appearing on the tire sidewall as follows: "MS," "M-S," "M/S," "M+S," any contraction using the letters "M" and "S," the words "MUD AND SNOW," or a "Mountain/ Snowflake" (Figure 1) symbol.



Figure 1. Mountain/Snowflake Symbol

- (de)** Studded tires are pneumatic tires containing metal-type studs of tungsten carbide or other suitable material which are embedded into the surface of the tire to improve traction on snowy or icy roads. Studded tires shall comply with Vehicle Code Section 27454.
- (ef)** Textile traction devices are constructed of a fabric weave covering which is installed over the tire and provides additional traction material to the tread area of the tire.
- (fg)** Tire cables are steel cables which have high strength steel cross member rollers which are evenly spaced to cover the surface area of the tire. These devices may also be referred to as "cable chains."
- (gh)** Tire chains are metal chains constructed of two circular metal chain loops, one on each side of the tire, connected by metal chains across the tire, which are evenly spaced except in the area where the chain loops are fastened and adjusted. These devices may also be referred to as "traditional," "link-type," "ladder-type," or welded metal chains.
- (hi)** Tire Traction Devices are ATDs, Automatic Tire Chains, Textile Traction Devices, Tire Cables, Tire Chains, and Wheel-hub attached chains. Snow-tread tires and studded tires are not tire traction devices as defined in Vehicle Code Section 605.
- (ij)** Wheel-hub attached chains are constructed so that the device is secured to the outer wheel-rim of a vehicle using plastic or metal components which positions the chain between the tire and the roadway.

Note: Authority cited: Sections 26103, 34501.5 and 34508, California Vehicle Code. Reference cited: Sections 440, 485, 558, 605, 610, 21461, 26103, 26104, 27454, 27459, 27460, 27465, 34501.5, and 34508, California Vehicle Code.

§ 1072. General Application. ~~Different types of traction devices include: Tire chains, automatic tire chains, tire cables, and alternative traction control devices. Snow tread tires and studded tires can improve traction on snow or ice; however, they are not considered traction control devices.~~ When the California Department of Transportation or local authority posts an official traffic control ~~signs~~ device which requires the use of chains or chain control for roadway due to inclement weather and highway conditions, vehicles ~~must~~ shall comply with the following:

- (a)** For all vehicles, including vehicles with all-wheel drive and four wheel drive, under 10,000 pounds, and housecars regardless of weight:

- (1) The tire traction devices shall be ~~mounted~~ installed on at least two tires of the drive axle. For all-wheel drive ~~or~~ and four wheel drive vehicles, the devices shall be ~~mounted~~ installed on at least two tires of ~~the same one~~ drive axle.
- (2) The tire traction devices shall be ~~mounted~~ installed on at least two tires of the drive axle when towing another vehicle, including a trailer or semitrailer. The devices shall be installed on at least two tires of the rear-most axle of a trailer, and on ~~the~~ at least two tires of a semitrailer axle, when trailer or semitrailer axles are equipped with brakes. ~~of a towed trailer.~~
- (b) For buses:
- (1) The tire traction devices shall be ~~mounted~~ installed on at least two tires of the drive axle of a two axle bus.
- (2) The tire traction devices shall be installed on at least two tires ~~first~~ of the drive axle of a three axle bus.
- (~~2~~3) In addition, if the bus is articulated, the tire traction devices shall be ~~mounted~~ installed on at least two tires of the drive axle and on at least two tires of the ~~last~~ rear-most axle of a three axle bus.
- (c) For vehicles over 10,000 pounds:
- (1) Pickup truck. The tire traction devices shall be ~~mounted~~ installed on at least two tires of the drive axle.
- (2) Two axle motor truck. The tire traction devices shall be ~~mounted~~ installed on at least two tires of ~~the~~ a drive axle.
- (3) Three axle motor trucks. The tire traction devices shall be ~~mounted~~ installed on at least four tires of the drive axle(s).
- (4) Truck tractors. On a two axle or three axle truck tractor ~~The~~ tire traction devices shall be ~~mounted~~ installed on at least four tires of the drive axle(s).
- (d) For vehicle combinations over 10,000 pounds:
- (1) Truck tractor/Semitrailer. On a two axle or three axle truck tractor the tire traction devices shall be ~~mounted~~ installed on at least four tires of the drive axle(s) and on a ~~semi-trailer~~ semitrailer the tire traction devices shall be ~~mounted~~ installed on at least two tires of the ~~last one~~ axle.
- (2) Two axle ~~Truck~~ truck tractor/Semitrailer/Trailer. On a two axle truck tractor the tire traction devices shall be ~~mounted~~ installed on at least four tires of the drive axle(s) and on a ~~semi-trailer~~ semitrailer the tire traction devices shall be ~~mounted~~ installed on at least two tires of the ~~last~~ one axle and on a trailer the tire traction devices shall be ~~mounted~~ installed on at least two tires of the ~~last~~ rear-most axle.
- (A) Single drive two axle truck tractor/semitrailer/trailer combinations shall be prohibited from designated chain control areas when signs are posted prohibiting this specific type of vehicle combination.
- (3) Three axle truck tractor/Semitrailer/Trailer. On a three axle truck tractor the tire traction devices shall be installed on at least four tires of the forward drive axle and two tires of the rear drive axle and on a semitrailer the tire traction devices shall be installed on at least two tires of the rear-most axle and on a trailer the devices shall be installed on at least two tires of the rear-most axle. When a three axle truck tractor is equipped with only two tires per drive axle, the tire traction devices shall be installed on all four tires of both drive axles.

- (A) Single drive three axle truck tractor/semitrailer/trailer combinations shall be prohibited from designated chain control areas when signs are posted prohibiting this specific type of vehicle combination.
- (34) Motor truck/Trailer. On a two axle motor truck the tire traction devices shall be mounted installed on at least four two tires of the drive axle(s) with a two or three axle and on a three axle motor truck at least two tires of the forward drive axle and at least two tires of the rear drive axle and on a trailer the tire traction devices shall be mounted installed on at least two tires of the last rear-most axle. When a three axle motor truck is equipped with only two tires per drive axle, the tire traction devices shall be installed on all four tires of both drive axles.
- (e) Wheeled machinery, regardless of weight, including, but not limited to, wheel loaders, skid loaders, backhoes, motor graders, tractors, snow blowers, and snow plows:
- (1) The tire traction devices shall be installed on at least two tires of at least one drive axle.
- (f) The required tire traction devices shall be installed on at least two tires at opposite sides of the same axle for all vehicles.
- (eg) The Department of Caltrans and the California Highway Patrol may require A specific type of tire traction devices may be required to be installed to meet the requirements of Vehicle Code Section 27459 on drive tires, on additional tires, or all tires of a vehicle, when severe local weather and highway conditions warrant.
- (h) A vehicle is prohibited from entering a designated chain control area when tire traction devices do not meet the requirements of this article or when tire traction devices are not present with the vehicle.
- (1) A government vehicle, authorized emergency vehicle, and snow removal equipment may be permitted to enter a designated chain control area when not equipped with the required tire traction devices provided exigent circumstances, or an otherwise immediate need for those vehicles to access the designated chain control area exist.

Note: Authority cited: Sections 26103, 34501.5 and 34508, California Vehicle Code. Reference cited: Sections 165, 230, 233, 362, 410, 440, 471, 550, 558, 605, 630, 655, 670, 26103, 26104, 27454, 27459, 27460, 31401, 34501.5; and 34508, California Vehicle Code.

§ 1073. Tire Chain Requirements. To be considered compliant with this article, the tire chains shall meet the following standards:

- (a) Tire chains shall meet the design, and construction, and testing requirements for regular or reinforced chains in the ~~Tire Chain Specifications National Association of Chain Manufacturers 92805 standard~~ National Association of Chain Manufacturers' "Tire Chain Specifications Number NACM 92805 (TC)" (Adopted September 25, 2005) (the "NACM 92805 Standard"), which is hereby incorporated by reference. The tire chains ~~devices must~~ shall be tested in accordance with the NACM 92805 ~~published a~~ Standard on vehicles which are manufacturer-certified as compliant with the United States Federal Motor Vehicle Safety Standards. The testing shall be conducted using United States Department of Transportation approved tires.
- (b) The tire chains and packaging thereof shall be marked indicating compliance with the NACM 92805 Standard.

(c) Availability of Referenced Document. Copies of the NACM 92805 Standard can be obtained from:

National Association of Chain Manufacturers

P.O. Box 89014

Tucson, AZ 85752-9014

Phone: (248) 994-2222

Internet Access: <https://www.nacm.info/specifications/tire-chain-specifications/>

Note: Authority cited: Section 26103, California Vehicle Code. Reference cited: Sections 605, 26103, 26104, 27459 and 27459.5, California Vehicle Code.

§ 1074. Alternative ~~Tire~~ Traction Device (ATD) Requirements. ~~Alternative Tire Traction Devices~~ To be considered compliant with this article, the ATDs shall meet the following standards:

(a) The ATDs ~~traction devices must~~ shall be tested in accordance with the Austrian Standards Institute's Önorm V5117 Standard, (Issue: 2007-09-01), the Önorm V5119 Standard, (Issue: 2008-05-01), or the Önorm V5121 Standard, (Issue: 2007-11-01), published by Austrian Standards Institute. The testing shall be conducted on vehicles which are manufacturer certified as compliant with the United States Federal Motor Vehicle Safety Standards. The testing shall be conducted using United States Department of Transportation-approved tires for the following configurations:

(1) For vehicles under 10,000 pounds, ~~at minimum~~ and housecars regardless of weight:

(A) On a two axle vehicle the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least two tires of the ~~same~~ drive axle, ~~tires~~.

(B) Include the following tests:

(i) Durability testing of the ~~product~~ ATD on dry ~~or~~ and wet roadway;

(ii) Acceleration on snow and ~~or~~ ice;

(iii) Deceleration on snow and ~~or~~ ice; and

(iv) Traction force of the ~~product~~ ATD on snow.

(v) Be compared to a the tire chain or the tire cable when tested using the same standard to show that a ~~traction device~~ the ATD meets or exceeds the same testing standard as compared to the results of a the tire chain or the tire cable, for traction, ~~and braking, and cornering~~ ability on snow and ice covered surfaces.

(2) For vehicles and combinations over 10,000 pounds, ~~at minimum~~:

(A) On a two axle motor truck the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least two tires of the ~~same~~ drive axle ~~tires~~.

(B) On a three axle motor truck the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least four tires of the drive axles.

(C) On two axle or three axle truck tractors the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least four tires of the drive axle(s).

(D) On a ~~semi-trailer~~ semitrailer the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least two tires of at least the last one axle.

(E) On a trailer the ATDs shall be installed on at least two tires of the rear-most axle.

(~~EF~~) On a two axle bus the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least two tires of the drive axles.

(FG) On a three axle bus the ~~devices~~ ATDs shall be ~~mounted~~ installed on at least two tires of the drive axles.

(GH) Include the following tests:

- (i) Durability testing of the ~~product~~ ATD on dry ~~or~~ and wet roadway;
- (ii) Acceleration on snow and/or ice;
- (iii) Deceleration on snow and/or ice; and
- (iv) Traction force of the ~~product~~ ATD on snow.
- (v) Be compared to a tire chain or tire cable when tested using the same standard to show that a ~~the traction device~~ ATD meets or exceeds the standard as compared to the results of a tire chain, or tire cable, for traction, ~~and braking, and~~ **cornering** ability on snow and ice covered surfaces.

(b) ATDs shall be installed on at least two tires at opposite sides of the same axle.

~~(bc) Traction devices must~~ ATDs shall ~~cooperate well~~ function compatibly with any given electronic driving support assistance technology such as Anti-locking Braking Systems, Electronic Stability Program Control, and ~~Anti-Slip Regulation~~ Traction Control Systems.

~~(ed) Traction devices~~ ATDs shall be resistant to ultraviolet light, corrosion, water, fuels, spreading salts, cinders, sand, salt brine and alcohols which may be used to aid in clearing the roadway.

(e) The ATDs and packaging thereof shall be marked ~~(Figure 2) or labeled indicating compliance with one of the following standards: in accordance with the specifications provided by the~~ **Önorm V5117 Standard, the Önorm V5119 Standard, or the Önorm V5121 Standard.**



Figure 2. Önorm Marking.

~~(df) The following documentation must~~ shall be provided to the ~~Department~~ California Highway Patrol, upon request:

- (1) The testing standard used, in English.
- (2) Documentation of the testing results, which ~~must~~ shall include the data produced for each test comparing the ~~traction device~~ ATD to the referenced tire chain or tire cable. Durability testing is not required to be provided for the referenced tire chain or tire cable.
- (3) A certified statement from the manufacturer of the ~~traction device~~ ATD outlining what measurable indicator of wear can be used by law enforcement to indicate when the product will no longer provide adequate traction equivalent to a tire chain or tire cable.
- (4) ~~Review and approval by a third party testing agency~~ Documentation that the tests were conducted according to the ~~published~~ **Önorm V5117, V5119 or V5121** ~~s~~Standard. ~~If testing cannot be done according to the published standard, companies may self certify any supplemental tests necessary to comply with the requirements in this section, provided that the data from the tests is confirmed by a third party testing agency. The Department may request the data be provided by the third party testing agency directly.~~
- (5) Certification of the test results by the manufacturer, which ~~must~~ shall contain the following statement: "I certify that the test methods, conditions and results reported are accurate and complete," ~~and~~ The manufacturer certification shall also bear the signature of the ~~tester~~ person or persons who conducted the testing.

(eg) The ~~Department~~ California Highway Patrol may, without prior notification, suspend the use of an ~~device~~ ATD if it finds there is danger to the public health, safety, or welfare that requires immediate action.

(h) Incorporation by Reference. This section incorporates by reference the **Önorm V5117 Standard published September 1, 2007, the V5119 Standard published May 1, 2008 and the V5121 Standard published November 1, 2007** (with the exception that the results of initial type testing report, which is documented in the German language).

(i) Availability of Referenced Document. Copies of the **Önorm V5117, V5119 and V5121 Standards** can be obtained from:

Austrian Standards Institute

Heinestrasse 38,

1020 Vienna, Austria

Phone: (+43 1) 213 00-805

Electronic Mailing Address: sales@on-norm.at

Or:

American National Standards Institute

Attn: Customer Service Department

25 W 43rd Street, 4th Floor,

New York, NY 10036

Phone: (212) 642-4980

Electronic Mailing Address: info@ansi.org

Note: Authority cited: Section 26103, ~~California~~ Vehicle Code. Reference cited: Sections 230, 233, 362, 410, 471, 550, 558, 605, 630, 655, 670, 26103, 26104, 27454, 27459, 27460, 31401, 34501.5, and 34508, ~~California~~ Vehicle Code.