

**State of California  
Office of Administrative Law**

**In re:**  
California Highway Patrol

**Regulatory Action:**

**Title 13, California Code of Regulations**

**Adopt sections:** 1070, 1071, 1072, 1073,  
1074

**Amend section:** Article 13 (in Division 2,  
Chapter 4)

**NOTICE OF APPROVAL OF REGULATORY  
ACTION**

**Government Code Section 11349.3**

**OAL Matter Number: 2019-0208-02**

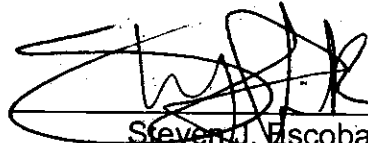
**OAL Matter Type: Regular Resubmittal (SR)**

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In this resubmittal of OAL Matter No. 2017-1221-02S, the California Highway Patrol ("CHP") proposes to adopt criteria for determining which types of tire traction devices are approved for use on California highways. Additionally, CHP proposes to adopt regulations specifying the placement of and performance standards for tire traction devices.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 7/1/2019.

**Date:** March 25, 2019

  
Steven J. Escobar  
Attorney

**Original:** Warren A. Stanley, Acting  
Commissioner

**Copy:** David Kelly

STD. 400 (REV. 01-2013)

OAL FILE NUMBERS	NOTICE FILE NUMBER <b>Z-2017-0127-01</b>	REGULATORY ACTION NUMBER <b>2019-0208-02 SR</b>	EMERGENCY NUMBER
For use by Office of Administrative Law (OAL) only			
NOTICE		REGULATIONS	

**ENDORSED - FILED**  
In the office of the Secretary of State  
of the State of California

**MAR 25 2019**  
1:44 PM

**2019 FEB -8 P 2: 18**  
OFFICE OF  
ADMINISTRATIVE LAW

AGENCY WITH RULEMAKING AUTHORITY  
Department of the California Highway Patrol

AGENCY FILE NUMBER (If any)  
CHP-R-2014-03

**A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)**

1. SUBJECT OF NOTICE	TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
3. NOTICE TYPE <input type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other	4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
<b>OAL USE ONLY</b> <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified <input type="checkbox"/> Disapproved/Withdrawn	ACTION ON PROPOSED NOTICE	NOTICE REGISTER NUMBER <b>2017 06-2</b>	PUBLICATION DATE <b>2/10/2017</b>

**B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)**

1a. SUBJECT OF REGULATION(S) Tire Traction Devices	1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S) 2017-1221-02S
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2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)	
<b>SECTION(S) AFFECTED</b> (List all section number(s) individually. Attach additional sheet if needed.)	ADOPT 1070, 1071, 1072, 1073, and 1074
	AMEND <b>Article 13 (in Title 13, Division 2, Chapter 4)</b>
TITLE(S) 13	REPEAL

per agency request  
je. 2/22/2019

3. TYPE OF FILING			
<input type="checkbox"/> Regular Rulemaking (Gov. Code §11346)	<input type="checkbox"/> Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.	<input type="checkbox"/> Emergency Readopt (Gov. Code, §11346.1(h))	<input type="checkbox"/> Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
<input checked="" type="checkbox"/> Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)	<input type="checkbox"/> Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)	<input type="checkbox"/> File & Print	<input type="checkbox"/> Print Only
<input type="checkbox"/> Emergency (Gov. Code, §11346.1(b))		<input type="checkbox"/> Other (Specify) _____	

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)  
December 14, 2018 to December 29, 2018 and January 15, 2019 to January 30, 2019

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)			
<input checked="" type="checkbox"/> Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))	<input type="checkbox"/> Effective on filing with Secretary of State	<input type="checkbox"/> §100 Changes Without Regulatory Effect	<input type="checkbox"/> Effective other (Specify) _____

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY			
<input type="checkbox"/> Department of Finance (Form STD. 399) (SAM §6660)	<input type="checkbox"/> Fair Political Practices Commission	<input type="checkbox"/> State Fire Marshal	
<input type="checkbox"/> Other (Specify) _____			

7. CONTACT PERSON Officer David Kelly	TELEPHONE NUMBER (916) 843-3400	FAX NUMBER (Optional) (916) 322-3154	E-MAIL ADDRESS (Optional) CVSRegs@chp.ca.gov
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8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE <i>K.M. Davis</i>	DATE <b>2-8-19</b>
TYPED NAME AND TITLE OF SIGNATORY K.M. DAVIS, Assistant Chief	

For use by Office of Administrative Law (OAL) only

**ENDORSED APPROVED**

**MAR 25 2019**

**Office of Administrative Law**

# DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

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

## Tire Traction Devices

### Article 13. Tire 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 and ice on the highway.

Note: Authority cited: Section 26103, Vehicle Code. Reference: Sections 605, 21461, 24006, 26103, 26104, 27459 and 27459.5, Vehicle Code.

§ 1071. Definitions.

- (a) Alternative Traction Device (ATD) is a tire traction device which differs from tire chains in construction, design, or material. The ATD is capable of providing traction equal to or exceeding the performance of 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 a driver may manually activate using a switch from inside the vehicle to automatically position a 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.
- (d) 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

- (e) 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.
- (f) 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.

- (g) 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."
- (h) 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.
- (i) 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.
- (j) 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, Vehicle Code. Reference: Sections 440, 485, 558, 605, 610, 21461, 26103, 26104, 27454, 27459, 27460, 27465, 34501.5 and 34508, Vehicle Code.

§ 1072. General Application. When the California Department of Transportation or local authority posts an official traffic control device which requires the use of chains or chain control due to inclement weather and highway conditions, vehicles 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 installed on at least two tires of the drive axle. For all-wheel drive and four wheel drive vehicles, the tire traction devices shall be installed on at least two tires of one drive axle.
  - (2) The tire traction devices shall be installed on at least two tires of the drive axle when towing another vehicle, including a trailer or semitrailer. The tire traction devices shall be installed on at least two tires of the rear-most axle of a trailer, and on at least two tires of a semitrailer axle, when trailer or semitrailer axles are equipped with brakes.
- (b) For buses:
  - (1) The tire traction devices shall be 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 of the drive axle of a three axle bus.
  - (3) In addition, if the bus is articulated, the tire traction devices shall be installed on at least two tires of the drive axle and on at least two tires of the rear-most axle of a three axle bus.
- (c) For vehicles over 10,000 pounds:
  - (1) Pickup truck. The tire traction devices shall be installed on at least two tires of the drive axle.
  - (2) Two axle motor truck. The tire traction devices shall be installed on at least two tires of a drive axle.
  - (3) Three axle motor trucks. The tire traction devices shall be 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 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 installed on at least four tires of the drive axle(s) and on a semitrailer the tire traction devices shall be installed on at least two tires of one axle.
- (2) Two axle truck tractor/Semitrailer/Trailer. On a two axle truck tractor the tire traction devices shall be installed on at least four tires of the drive axle and on a semitrailer the tire traction devices shall be installed on at least two tires of one axle and on a trailer the tire traction devices shall be installed on at least two tires of the rear-most axle.
- (A) Single drive two axle truck tractor/semitrailer/trailer combinations shall be prohibited from designated chain control areas when traffic control 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 tire traction 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.
- (4) Motor truck/Trailer. On a two axle motor truck the tire traction devices shall be installed on at least two tires of the drive 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 installed on at least two tires of the 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.
- (g) A specific type of tire traction device 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, Vehicle Code. Reference: Sections 165, 230, 233, 362, 410, 440, 471, 550, 558, 605, 630, 655, 670, 26103, 26104, 27454, 27459, 27460, 31401, 34501.5 and 34508, 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, construction, and testing requirements for regular or reinforced chains in the National Association of Chain Manufacturers' "Tire Chain Specifications Number NACM 92805 (TC)" (Adopted September 25, 2005 and Re-Affirmed without change April 12, 2015) (the "NACM 92805 Standard"), which is hereby incorporated by reference. The tire chains shall be tested in accordance with the NACM 92805 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, Vehicle Code. Reference: Sections 605, 26103, 26104, 27459 and 27459.5, Vehicle Code.

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

- (a) The ATDs shall be tested in accordance with the Austrian Standards Institute's Önorm V5117 Standard (Issue: 2007-09-01), the Austrian Standards Institute's Önorm V5119 Standard (Issue: 2008-05-01), or the Austrian Standards Institute's Önorm V5121 Standard (Issue: 2007-11-01). 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, and housecars regardless of weight:
    - (A) On a two axle vehicle the ATDs shall be installed on at least two tires of the drive axle.
    - (B) Include the following tests:
      1. Durability testing of the ATD on dry or wet roadway;
      2. Acceleration on snow and ice;
      3. Deceleration on snow and ice; and
      4. Traction force of the ATD on snow.
      5. Be compared to the tire chain or the tire cable when tested using the same standard to show that the ATD meets or exceeds the same testing standard as

compared to the results of the tire chain or the tire cable, for traction, and braking ability on snow and ice-covered surfaces.

- (2) For vehicles and combinations over 10,000 pounds:
  - (A) On a two axle motor truck the ATDs shall be installed on at least two tires of the drive axle.
  - (B) On a three axle motor truck the ATDs shall be installed on at least four tires of the drive axles.
  - (C) On two axle or three axle truck tractors the ATDs shall be installed on at least four tires of the drive axle(s).
  - (D) On a semitrailer the ATDs shall be installed on at least two tires of at least one axle.
  - (E) On a trailer the ATDs shall be installed on at least two tires of the rear-most axle.
  - (F) On a two axle bus the ATDs shall be installed on at least two tires of the drive axle.
  - (G) On a three axle bus the ATDs shall be installed on at least two tires of the drive axle.
  - (H) Include the following tests:
    - 1. Durability testing of the ATD on dry or wet roadway;
    - 2. Acceleration on snow and ice;
    - 3. Deceleration on snow and ice; and
    - 4. Traction force of the ATD on snow.
    - 5. Be compared to a tire chain or tire cable when tested using the same standard to show that the ATD meets or exceeds the standard as compared to the results of a tire chain, or tire cable, for traction, and braking ability on snow and ice covered surfaces.
- (b) ATDs shall be installed on at least two tires at opposite sides of the same axle.
- (c) ATDs shall function compatibly with any given electronic driving assistance technology such as Anti-locking Braking Systems, Electronic Stability Control, and Traction Control Systems.
- (d) 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 indicating compliance with one of the following standards: the Önorm V5117 Standard, the Önorm V5119 Standard, or the Önorm V5121 Standard.
- (f) The following documentation shall be provided to the California Highway Patrol, upon request:
  - (1) The testing standard used, in English.
  - (2) Documentation of the testing results, which shall include the data produced for each test comparing the 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 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) Documentation that the tests were conducted according to the Önorm V5117 Standard, the Önorm V5119 Standard or the Önorm V5121 Standard.

- (5) Certification of the test results by the manufacturer, which shall contain the following statement: "I certify that the test methods, conditions and results reported are accurate and complete." The manufacturer certification shall also bear the signature of the person or persons who conducted the testing.
- (g) The California Highway Patrol may, without prior notification, suspend the use of an 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 Austrian Standards Institute's Önorm V5117 Standard (Issue: 2007-09-01), the Austrian Standards Institute's Önorm V5119 Standard (Issue: 2008-05-01), and the Austrian Standards Institute's Önorm V5121 Standard (Issue: 2007-11-01) (with the exception that the results of initial type testing be documented in a test report in the German language).
- (i) Availability of Referenced Document. Copies of the Önorm V5117 Standard, the Önorm V5119 Standard and the Önorm V5121 Standard can be obtained from:
- Austrian Standard's Institute  
Heinestrasse 38,  
1020 Vienna, Austria  
Phone: (+43 1) 213 00-805  
Electronic Mailing Address: [sales@on-norm.at](mailto:sales@on-norm.at)
- Or:
- American National Standards Institute  
Attn: Customer Service Department  
25 W 43<sup>rd</sup> Street, 4<sup>th</sup> Floor,  
New York, NY 10036  
Phone: (212) 642-4980  
Electronic Mailing Address: [info@ansi.org](mailto:info@ansi.org)

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