

FIRE APPARATUS DRIVER/OPERATOR 1A

Emergency Vehicle Operations

Student Supplement



Published by

STATE FIRE TRAINING
PO Box 944246
Sacramento, CA 94244-2460

January 2011



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Mission Statement



Mission Statement

The mission of State Fire Training is to enable the California fire service to safely protect life and property through education, training, and certification.

California Fire Service Training and Education System

The California Fire Service Training and Education System (CFSTES) was established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California Fire Service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

The role of CFSTES is one of facilitating, coordinating, and assisting in the development and implementation of standards and certification for the California fire service. CFSTES manages the California Fire Academy System by providing standardized curriculum and tests; accredited courses leading to certification; approved standardized training programs for local and regional delivery; administering the certification system; and publishing Career Development Guides, Instructors Guides, Student Manuals, Student Supplements, and other related support materials.

This system is as successful and effective as the people involved in it are. It is a fire service system developed by the fire service, for the fire service... and we believe it is the best one in the country.

Acknowledgments

State Fire Training coordinated the development of the material contained in this guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this guide for adoption by the State Fire Marshal (SFM). This guide is appropriate for fire service personnel and for personnel in related occupations that are pursuing State Fire Training certification.

Ken Pimlott Acting Director of CAL FIRE	
Tonya Hoover Acting State Fire Marshal	Vacant Assistant State Fire Marshal
Mike Richwine Chief, State Fire Training	Ronny J. Coleman Chair, STEAC



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Acknowledgments



Special acknowledgement and thanks are extended to the following members of State Fire Training for their diligent efforts and contributions that made the final publication of this document possible.

Alicia Hamilton
Fire Service Training Specialist III

The material contained in this document was compiled and organized through the cooperative effort of numerous professionals within, and associated with, the California fire service.

We gratefully acknowledge the following individuals who served as principal developers for this document.

David Anderson CDF – Riverside Unit	Tom Hostetter CDF – Nevada/Yuba/Placer Unit
Gus Bryant Kern County Fire Department	Don Mashburn Sacramento Fire Department
Robert Confer Tiburon And Ben Lomond Fire Districts	Tom Murray San Francisco Fire Department (Retired)
Tom Davis Modesto Regional Fire Training Center	Don Ockey Fresno City Fire Department
Roy Francis Pasadena Fire Department	John Owens CDF – San Luis Obispo Unit
Thomas D. Gallinatti Oakland Fire Department	Mark Romer, Team Leader Roseville Fire Department (Retired)

"We gratefully acknowledge the hard work and accomplishments of those before us who built the solid foundation on which this program continues to grow."



FIRE APPARATUS DRIVER/OPERATOR 1A

Emergency Vehicle Operations

Course Outline



Course Outline

Course Objectives: To provide the student with...

- a) Information on driver responsibilities, recognized standards, and related laws for fire apparatus.
- b) Information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus.
- c) Information and techniques on driving and positioning fire apparatus.
- d) The opportunity to increase their driving skills during simulated driving conditions.

Course Content**40:00**

Unit 1: Responsibilities, Standards, and Laws

- 1-1 Orientation And Administration 1:00
- 1-2 Fire Apparatus Driver/Operator Responsibilities 0:45
- 1-3 Legal Aspects Of Emergency And Nonemergency Driving 1:00

Unit 2: Inspection, Basic Maintenance, Documentation, and Troubleshooting

- 2-1 Introduction To Inspection, Basic Maintenance, and Troubleshooting 0:30
- 2-2 Inspection And Basic Maintenance Of The Driver And Crew Areas, Apparatus Body, And Compartmentation 0:15
- 2-3 Inspection And Basic Maintenance Of The Frame, Axles, Steering And Suspension Systems, Driveline, Wheels, And Tires 0:15
- 2-4 Troubleshooting The Frame, Axles, Steering And Suspension Systems, Driveline, Wheels, And Tires 0:30
- 2-5 Inspection And Basic Maintenance Of Engine Systems..... 0:45
- 2-6 Troubleshooting Engine Systems 0:30
- 2-7 Inspection And Basic Maintenance Of The Transmission And Clutch 0:15
- 2-8 Troubleshooting The Transmission And Clutch..... 0:15
- 2-9 Inspection And Basic Maintenance Of The Starting, Charging, And Other Electrical Systems..... 0:30
- 2-10 Troubleshooting The Starting, Charging, And Other Electrical Systems 2:00
- 2-11 Inspection And Basic Maintenance Of Brake Systems..... 1:30
- 2-12 Troubleshooting Brake Systems 1:00
- 2-13 Inspection And Basic Maintenance Of Auxiliary And Accessory Equipment 0:15
- 2-14 Inspection Documentation And Reports..... 0:15
- 2-15 Pretrip Inspection Procedures 2:00

Unit 3: Driving Practices

- 3-1 Accident Statistics And Liability 0:30



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Texts and References



3-2	Principles Of Defensive Driving	2:00
3-3	Driving Apparatus To Incidents	1:00
3-4	Principles Of Off-Road Driving	1:00
3-5	Principles Of Braking And Stopping	0:30
3-6	Principles Of Steering And Load Control	1:30
3-7	Driving During Adverse Weather Conditions	0:15
3-8	Positioning Apparatus	1:00

Unit 4: Mandatory Driving Exercises

5-1	Introduction To The Mandatory Driving Exercises.....	0:30
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Unit 5: Optional Driving Exercises

6-1	Introduction To The Optional Driving Exercises	0:15
-----	--	------

Practice and Testing the Driving Exercises	14:00
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Unit Tests	3:00
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Review and Certification Exam	1:00
--	------

Texts and References

- Basic Fire Control Module 2A Automotive Battalion Student Supplement, CDF, 1999 Edition, Off Road Vehicle Operations Unit
- California Commercial Driver Handbook, DMV, 2008 Edition
- Chilton technical manuals
- Driver Awareness Instructor Course Manual, California Commission on Peace Officer Standards and Training, 1999 Edition
- Engineer Training Manual, Tiburon Fire Protection District, 2000 Edition, Section 53
- <http://www.bendix.com/troubleshooting/>
- Introduction to Fire Pump Operations, Delmar, 2005 Edition
- Motor Truck & Diesel Repair Manual, Bendix Commercial Vehicle Systems, 29th Edition
- NFPA 1001: Standard for Fire Fighter Professional Qualifications, NFPA, 2008 Edition
- NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications, 2009 Edition
- NFPA 1451: Standard for a Fire Service Vehicle Operations Training Program, 2007 Edition
- NFPA 1500: Standard on Fire Department Occupational Safety and Health Program, 2007 Edition
- NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments, 2007 Edition
- NFPA 1911: Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus, 2007 Edition



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Texts and References



- NFPA Journal, July/August 2001 Edition
- NFPA Journal, November/December 2007 Edition
- Off Road and 4-Wheel Driver Operational Procedures Manual, Kern County Fire Department, 1999 Edition
- Pumping Apparatus Driver/Operator Handbook, IFSTA, Second Edition
- Sacramento Regional Driver's Training Authority Student Manual, First Edition
- State of California 2007 Vehicle Code, DMV, 2007 Edition
- Title 49 CFR Transportation, U.S. Government Printing Office, October 2006 Edition
- University of Michigan Transportation Research Study of 1998, University of Michigan
- Webster's Unabridged Dictionary, Random House, Second Edition



FIRE APPARATUS DRIVER/OPERATOR 1A

Emergency Vehicle Operations

Calendar of Events



Calendar of Events

DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION	
Day 1	1-1	Orientation And Administration	1:00			
	1-2	Fire Apparatus Driver/Operator Responsibilities	0:45			
	1-3	Legal Aspects Of Emergency And Nonemergency Driving	1:00	1-3-1		
	2-1	Introduction To Inspection, Basic Maintenance, And Troubleshooting	0:30			
	2-2	Inspection And Basic Maintenance Of The Driver And Crew Areas, Apparatus Body, And Compartmentation	0:15			
	2-3	Inspection And Basic Maintenance Of The Frame, Axles, Steering And Suspension Systems, Driveline, Wheels, And Tires	0:15			
	2-4	Troubleshooting The Frame, Axles, Steering And Suspension, Driveline, Wheels, And Tires	0:30			
	2-5	Inspection And Basic Maintenance Of Engine Systems	0:45			
	2-6	Troubleshooting Engine Systems	0:30			
	2-7	Inspection And Basic Maintenance Of The Transmission And Clutch	0:15			
	2-8	Troubleshooting The Transmission/Clutch	0:15			
	2-9	Inspection And Basic Maintenance Of The Starting, Charging, And Other Electrical Systems	0:30			
	2-10	Troubleshooting The Starting, Charging, And Other Electrical Systems	1:30			
			Day 1 Total	8:00		
Day 2	2-10	Troubleshooting The Starting, Charging, And Other Electrical Systems	0:30			
	2-11	Inspection And Basic Maintenance Of Brake Systems	1:30			
	2-12	Troubleshooting Brake Systems	1:00			
	2-13	Inspection And Basic Maintenance Of Auxiliary And Accessory Equipment	0:15			
			1:00			Test #1
	2-14	Inspection Documentation And Reports	0:15			
	2-15	Pretrip Inspection Procedures	2:00	2-15-1		
	3-1	Accident Statistics And Liability	0:30			
	3-2	Principles Of Defensive Driving	1:00			
			Day 2 Total	8:00		



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Calendar of Events



DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION	
Day 3	3-2	Principles Of Defensive Driving	1:00	3-2-1		
	3-3	Driving Apparatus To Incidents	1:00			
	3-4	Principles Of Off-Road Driving	1:00			
	3-5	Principles Of Braking And Stopping	0:30			
	3-6	Principles Of Steering And Load Control	1:30			
	3-7	Driving During Adverse Weather Conditions	0:15			
	3-8	Positioning Apparatus	1:00			
			1:00			Test #2
	4-1	Introduction To The Mandatory Driving Exercises	0:30			
	5-1	Introduction To The Optional Driving Exercises	0:15			
		Day 3 Total	8:00			
Day 4		Diminishing Clearance Exercise*	8:00	4-1-1		
		Serpentine Exercise*		4-1-2		
		Three-Point Turnaround Exercise*		4-1-3		
		Station Apparatus Backing Exercise*		4-1-4		
		Alley Dock Exercise*		4-1-5		
		Lane Change Exercise		5-1-1		
		Offset Alley Exercise		5-1-2		
		Dogleg Exercise		5-1-3		
		Parallel Parking Exercise		5-1-4		
		Day 4 Total		8:00		
Day 5		Practice Driving Exercises	7:00		Performance Exams	
		Graded Exercises				
		Review And Certification Exam	1:00		Certification Exam	
		Day 5 Total	8:00			

*Mandatory Driving Exercises



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Topic 1-1: Orientation and Administration



Topic 1-1: Orientation and Administration

Student information for this topic can also be found in Pumping Apparatus Driver/Operator Handbook, IFSTA, Second Edition, Pages 1-10.

Course Prerequisites

- Fire apparatus driving experience on a public way (two options).
 - California Class C driver's license and a signed verification of driving fire apparatus on a public way.
 - Section 4.3.1 of the NFPA Standard for Fire Apparatus Driver/Operator Professional Qualifications, 2009 Edition.
 - Signed by you and your Fire Chief.
 - California Class A, B, or C driver's license with a fire fighter endorsement.
- Fire Fighter I training recommended.

Student Evaluation

- Activities.
 - Complete all activities.
- Two written unit tests.
 - Each followed with group discussion.
 - All tests must be completed and passed with a minimum score of 80%.
 - Tests must be returned to the instructor after review.
- Driving exercises.
 - Manipulative skills tracking and accountability.
 - Minimum 80% score to pass each mandatory manipulative performance test.
- Progress chart.
- State certification exam.
 - Not related to final course grade.
 - Must pass the class first before taking the exam.
 - 50 question multiple-choice exam.
 - Minimum 70% required to pass the certification exam.

Course Description

- 40-hour class.
 - Classroom information and activities.
 - Reading assignments.
 - Apparatus inspection.
 - Hands-on driving exercises.
- Start and end times.
 - Class will begin on time.
 - Student attendance requirements.
 - Must attend the entire course.
 - Excused absences may be considered for emergencies.
- Proper attire.
 - Classroom.
 - Station wear or equivalent.
 - Station boots or equivalent.
 - Field exercises.
 - Station wear or equivalent.
 - Station boots or equivalent.
 - Helmet.
 - Gloves.
- Required textbooks.
 - Pumping Apparatus Driver/Operator Handbook, IFSTA, Second Edition
 - California Commercial Driver Handbook, DMV
 - State Fire Training student supplement

Course Objectives

Provide the students with...

- Information on driver responsibilities, recognized standards, and related laws for fire apparatus.
- Information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus.
- Information and techniques on driving and positioning fire apparatus.
- The opportunity to increase their driving skills during simulated driving conditions.



FIRE APPARATUS DRIVER/OPERATOR 1A

Emergency Vehicle Operations

Topic 1-1: Orientation and Administration



Historical Overview

The first course, and foundation, of the current Fire Apparatus Driver/Operator certification program was titled Driver/Operator I and II. This course was first offered through the California State Fire Marshal's Office in September 1982. The program consisted of sixteen 8-hour classes that had to be completed to receive California State Fire Marshal certification. The course objectives and direction was based upon the career development guide, derived from the California Fire Service Occupational Analysis. Also used as a reference and basis of the course objectives was the National Fire Protection Association (NFPA) Pamphlet 1002 titled: Fire Apparatus Driver/Operator Professional Qualifications.

Since the inception of the Driver/Operator I and II courses, the demands and expectations placed upon the fire service and the professional apparatus driver/operator have greatly increased. Legal, ethical, and operational responsibilities have grown in dimension, requiring several revisions and modifications to the original Driver/Operator I and II. This most recent redesign of the fire apparatus driver/operator curriculum encompasses these new and critical responsibilities, while maintaining the foundation of the original Driver/Operator I and II programs. The intent of this course is to maintain the highest level of ability, skills, and integrity of the professional fire apparatus driver/operator, while preparing all personnel to face the ongoing challenges of their profession.

Desirable Skills

The following skills and senses have been found to be critical to be a successful driver/operator:

- Reading ability: for understanding all laws, signs, and relevant memos/orders.
- Writing ability: clearly and concisely for documentation and reporting.
- Mathematical ability: basic algebra skills necessary for hydraulics.
- Physical fit: high demands both physical and mental.
- Hearing and vision: as required by law and department standards.
- Mechanical ability: A critical skill of the professional driver/operator. If Plan A fails, what is Plan B? If Plan B fails, what is Plan C, and so on?
- Basis supervisory skills: If the company officer is injured or unavailable, it may be necessary for the fire apparatus driver/operator to make officer-level decisions.
- Have the ability to remain calm, think, and make decisions under pressure.
- Must have the ability to avoid "tunnel vision," always be aware of surroundings and the entire situation.
- Have the ability to identify safety hazards.



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Emergency Vehicle Operations

Topic 1-1: Orientation and Administration



National Fire Protection Association Standards

The following information is paraphrased from the actual code. The standard listing is in a priority order for this program.

NFPA 1500: Standard for Fire Department Occupational Safety and Health Program

- Chapter 5: Training and Education.
 - Section 5.2.2: Must meet applicable requirements specified in NFPA 1002.
 - Section 5.3.1: Training provided as often as necessary to meet applicable requirements of this chapter.
- Chapter 6: Fire Apparatus, Equipment, and Driver/Operators.

NFPA 1001: Standard for Fire Fighter Professional Qualifications

- Chapter 3: Fire Fighter I.
 - 3-1.1.1: General knowledge requirements.
 - 3-1.1.2: General skills requirements.

NFPA 1002: Standard For Fire Apparatus Driver/Operator Professional Qualifications

- Chapter 1: Administration.
- Chapter 4: General Requirements.
- Chapter 5: Apparatus Equipped with a Fire Pump.
- Appendix A: Explanatory Material.

NFPA 1911: Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus

- Chapter 1: Administration.
- Chapter 4: General Requirements.
- Chapter 6: Out-of-Service Criteria.
- Chapter 7: Inspection and Maintenance of the Chassis, Driving and Crew Compartment, and Body.
- Chapter 8: Inspection and Maintenance of Low Voltage Electrical Systems.
- Chapter 14: Inspection and Maintenance of Utility Air and Breathing Air Systems.
- Chapter 17: Performance Testing of Low Voltage Electrical Systems.
- Chapter 22: Performance Testing of Line Voltage Electrical Systems.
- Chapter 23: Performance Testing of Breathing Air Compressor Systems.
- Appendix A: Explanatory Material.

NFPA 1451: Standard For A Fire Service Vehicle Operations Training Program

- The entire standard applies.

Topic 1-2: Fire Apparatus Driver/Operator Responsibilities

Student information for this topic can also be found in the California Commercial Driver Handbook, DMV, 2008 Edition, Pages 19-23 and Pumping Apparatus Driver/Operator Handbook, IFSTA, Second Edition, Pages 1-2, 9, 31-61, 64-65, 73-74, 76-88, 99-105, 151-161, 418-425.

Fire Fighter Injury and Death Statistics

According to NFPA statistics, the second leading cause of on-duty deaths to fire fighters is vehicle crashes and collisions. Of the 102 total "Line of Duty Deaths" of fire fighters in 2007, 20 deaths occurred in collisions or rollovers. Whether responding to an emergency incident, or in nonemergency status, safety for fire service personnel and civilians alike is of paramount importance. Not only is it the responsibility of the fire apparatus driver/operator to observe and enforce all safety issues, it is the responsibility of all fire service personnel to watch for any possible safety hazards.

Safety

Safety is of the highest importance in every aspect of our profession. Regardless of whether you are responding to, or involved in, an active emergency incident, or merely in the nonemergency status, we all must be alert to any possible hazard. As a fire apparatus driver/operator, your primary responsibility and obligation to prevent any injury from occurring to both fire service and nonfire service personnel occurs in several areas.

- Prior to leaving the fire station.
 - All personnel must be seated, with seat belts on.
 - All cords and attachments to apparatus are removed.
 - Apparatus bay doors are completely opened.
 - Apparatus compartment doors are closed.
 - All equipment is properly stored and removed from apparatus area.
 - Proper apparatus checks have been performed.
- Driving status.
 - Always drive in the defensive mode.
 - Observe all laws and regulations related to the safe operation of fire apparatus.
 - Use a spotter whenever backing up or when proceeding forward, if necessary.
 - Spotters should always remain in the view of the driver/operator, either by line of sight or by mirror.

Apparatus Placement and Operation

Scene hazards include:

- Possible building collapse.
- Electrical or wire hazards.
- Passing vehicles.
- Ground integrity.
- Civilian or emergency personnel.
- Other emergency vehicle placement.
- Weather and topography.

Other Responsibilities

A critical responsibility of the fire apparatus driver/operator is knowledge of your emergency response district. Time is of essence in any emergency, as is safety. A thorough knowledge of your response district, including traffic thoroughfares, traffic habits and hazards, will reduce critical minutes from the overall response time. Other points of importance include, but are not limited to:

- Hydrant locations and any unusual hydrants, such as a dead-end main.
- High life hazards such as, hospitals, low- and high-rise residential care homes, etc.
- High hazard facilities such as, chemical storage, radiation, high storage, etc.
- Access problems such as narrow roads, setbacks, loading zones, etc.



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Topic 1-3: Legal Aspects of Emergency and Nonemergency Driving



Topic 1-3: Legal Aspects of Emergency and Nonemergency Driving

Student information for this topic can also be found in the [California Commercial Driver Handbook](#), DMV, 2008 Edition, Pages 1-18 and [Pumping Apparatus Driver/Operator Handbook](#), IFSTA, Second Edition, Pages 9-10 and 63-64.

Licensing

Federal

Title 49 CFR, Part 383.23

The Federal Department of Transportation (DOT) is the federal agency with the responsibility of establishing the basic requirements for the states' commercial drivers license programs.

California

Assembly Bill 1648

This bill, effective January 1, 2011, amends Sections 1808.1, 12804.9, and 15278 and adds Section 12804.11 to the Vehicle Code. These changes revise and recast the provisions regulating the operation of fire-fighting equipment to permit certain persons employed as a fire fighter or registered as a volunteer fire fighter to operate fire-fighting equipment only if the person holds a Class A, Class B, or Class C license, with certain exceptions, and a **fire fighter endorsement** issued by the Department of Motor Vehicles (DMV).

Applicants must provide DMV proof of current employment with a fire department as a fire fighter or registration as a volunteer fire fighter, evidence of fire equipment operation training, passing the written fire fighter examination developed by DMV with the cooperation of the Office of the State Fire Marshal (OSFM), and submitting a report of medical examination on a DMV-approved form.

Repealed Sections of the Vehicle Code

The bill also repealed three sections of the Vehicle Code that affect fire fighters.

- Section 12954: Driver's license fire fighters emergency exemption
 - Exempted fire fighters from the requirement to have in their immediate possession the appropriate driver's license when operating fire-fighting equipment during an emergency, or when returning from an emergency
- Section 15250.6: Fire fighter equipment driver's license requirements
- Section 15250.7: Fire fighter equipment driver's license duplicate fee

California Commercial Driver Handbook (CCDH)

Guidelines and standards based upon CFR, Title 19.

Minimum Licensing

The minimum licensing requirement to drive fire apparatus in the State of California is a Class C license with a fire fighter endorsement. Under this license, the driver/operator may only drive a single fire fighting vehicle and any passenger vehicle with a GVWR under 26,000 pounds.

Medical Exam Requirements

The medical exam requirement for a Class C fire fighter endorsed driver's license is by a physician every four years.

California Vehicle Code

Code 3 Authorization

CVC Section 30

It is declared as a matter of legislative policy that red lights and sirens on vehicles should be restricted to authorized emergency vehicles engaged in police, fire, and lifesaving services; and that other types of vehicles which are engaged in activities which create special hazards upon the highways should be equipped with flashing amber warning lamps.

CVC Section 165.2

Any forestry or fire department of any public agency or fire department organized as provided in the Health and Safety Code.

Warning Systems

CVC Section 25252

Every authorized emergency vehicle shall be equipped with at least one steady burning red warning lamp visible from at least 1,000 feet to the front of the vehicle to be used as provided in this code. ***This is the minimum allowable by law.***

CVC Section 25252.5(a)

Flashing Headlamps on Authorized Emergency Vehicles

Every authorized emergency vehicle may be equipped with a system, which flashes the upper-beam headlamps of the vehicle with the flashes occurring alternately from the front headlamp on one side of the vehicle to the front headlamp on the other side of the vehicle. The flashing of the headlamps shall consist only of upper-beam flashing, and not the flashing of any other light beam.

CVC Section 25258

Authorized Emergency Vehicles: Additional Lights

An authorized emergency vehicle operating under the conditions specified in Section 21055 may display a flashing white light from a gaseous discharge lamp designed and used for the purpose of controlling official traffic control signals.



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Topic 1-3: Legal Aspects of Emergency and Nonemergency Driving



CVC Section 25259(a)

Additional Warning Lights on Authorized Emergency Vehicles

Any authorized emergency vehicle may display flashing amber warning lights to the front, sides, or rear.

CVC Section 25268

Use of Flashing Amber Warning Light

No person shall display a flashing amber warning light on a vehicle as permitted by this code except when an unusual traffic hazard exists.

CVC Section 25269

Use of Red Warning Light

No person shall display a flashing or steady burning red warning light on a vehicle except as permitted by Section 21055 or when an extreme hazard exists.

CVC Section 27000(a)

Horns or Warning Devices

An authorized emergency vehicle may be equipped with, and use in conjunction with the siren on that vehicle, an air horn that emits sounds that do not comply with the requirements of this section.

CVC Section 27001(a)

Use of Horns

The driver of a motor vehicle when reasonably necessary to insure safe operation shall give audible warning with his horn.

CVC Section 27002

Sirens

No vehicle, except an authorized emergency vehicle, shall be equipped with, nor shall any person use upon a vehicle any siren except that an authorized emergency vehicle shall be equipped with a siren meeting requirements established by the department.

Civil Liability

CVC Section 17001

Liability of a Public Entity

A public entity is liable for death or injury to person or property proximately caused by a negligent or wrongful act or omission in the operation of any motor vehicle by an employee of the public entity acting within the scope of his employment.

CVC Section 17002

Extent of Liability

Subject to Article 4 (commencing with Section 825) of Chapter 1 of Part 2 of Division 3.6 of "Title 1 of the Government Code, a public entity is liable for death or injury to person or



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property to the same extent as a private person under the provisions of Article 2 (commencing with Section 17150) of this chapter.

CVC Section 17004

Authorized Emergency Vehicles

A public employee is not liable for civil damages on account of personal injury to or death of any person or damage to property resulting from the operation, in the line of duty, of an authorized emergency vehicle while responding to an emergency call or when in the immediate pursuit of an actual or suspected violator of the law, or when responding to but not upon returning from a fire alarm or other emergency call.

Rules of the Road

CVC Section 21055

The driver or an authorized emergency vehicle is exempt from Chapter 2 (commencing with Section 21350), Chapter 3 (commencing with Section 21650), Chapter 4 (commencing with Section 21800), Chapter 5 (commencing with Section 21950), Chapter 6 (commencing with Section 22100), Chapter 7 (commencing with Section 22348), Chapter 8 (commencing with Section 22450), Chapter 9 (commencing with Section 22500), Section 10 (commencing with Section 22650) of this Division, and Article 3 (commencing with Section 38305) and Article 4 (commencing with Section 38312) of Chapter 5 of Division 16.5, and under all of the following conditions:

- (a) If the vehicle is being driven in response to an emergency call or while engaged in rescue operations or is being used in the immediate pursuit of an actual or suspected violator of the law or is responding to, but not returning from, a fire alarm, except that fire department vehicles are exempt whether directly responding to an emergency call or operated from one place to another as rendered desirable or necessary by reason of an emergency call and operated to the scene of the emergency or operated from one fire station to another or to some other location by reason of the emergency call.
- (b) If the driver of the vehicle sounds a siren as may be reasonably necessary and the vehicle displays a lighted red lamp visible from the front as a warning to other drivers and pedestrians.

A siren shall not be sounded by an authorized emergency vehicle except when required under this section.

CVC Section 21056

Effect of Exemption

Section 21055 does not relieve the driver of a vehicle from the duty to drive with due regard for the safety of all persons using the highway, nor protect him from the consequences of an arbitrary exercise of the privileges granted in that section.



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CVC Section 21706

Following Emergency Vehicles

No motor vehicle, except an authorized emergency vehicle, shall follow within 300 feet of any authorized emergency vehicle being operated under the provision of Section 21055.

CVC Section 21707

Fire Areas

No motor vehicle, except an authorized emergency vehicle or a vehicle of a duly authorized member of a fire or police department, shall be operated within the block wherein an emergency situation responded to by any fire department vehicle exists, except that in the event the nearest intersection to the emergency is more than 300 feet there from, this section shall prohibit operation of vehicles only within 300 feet of the emergency, unless directed to do so by a member of the fire department or police department, sheriff, deputy sheriff, or member of CHP. The emergency shall be deemed to have ceased to exist when the official of the fire department in charge at the scene of the emergency shall so indicate. Officials of the fire department, police department, or the Department of the California Highway Patrol who are present shall make every effort to prevent the closing off entirely of congested highway traffic passing the scene of any such emergency.

CVC Section 21708

Fire Hoses

No person shall drive or propel any vehicle or conveyance upon, over, or across, or in any manner damage any fire hose or chemical hose used by or under the supervision and control of any organized fire department. However, any vehicle may cross a hose provided suitable jumpers or other appliances are installed to protect the hose.

CVC Section 22104

Turning Near Fire Stations

No person shall make a U-turn in front of the driveway entrance or approaches to a fire station. No person shall use the driveway entrance or approaches to a fire station for turning a vehicle to proceed in the opposite direction.

CVC Section 22454

School Bus: Meeting and Passing

- (a) The driver of any vehicle, upon meeting or overtaking, from either direction, any school bus equipped with signs as required in this code, that is stopped for the purpose of loading or unloading any schoolchildren and displays a flashing red light signal and stop signal arm, as defined in paragraph (4) of subdivision (b) of Section 25257, if equipped with a stop signal arm, visible from front or rear, shall bring the vehicle to a stop immediately before passing the school bus and shall not proceed past the school bus until the flashing red light signal and stop signal arm, if equipped with a stop signal arm, cease operation.

- (b) (1) The driver of a vehicle upon a divided highway or multiple-lane highway need not stop upon meeting or passing a school bus that is upon the other roadway.
- (c) For the purposes of this subdivision, a multiple-lane highway is any highway that has two or more lanes of travel in each direction.

Safety

CVC Section 26700(a)

Windshields

Every fire truck, fire engine or other fire apparatus, whether publicly or privately owned, shall be equipped with an adequate windshield.

CVC Section 27305

Firefighting Vehicles

All publicly owned firefighting vehicles designed for and used in responding to emergency fire calls and in combating fires shall be equipped with seatbelts for each seat utilized by personnel when such vehicles are being operated.

Right-Of-Way

CVC Section 21806

Authorized Emergency Vehicles

Upon the immediate approach of authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following:

- (a) (1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed.
 - (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety.
- (b) The operator of every streetcar shall immediately stop the streetcar, clear of any intersection, and remain stopped until the authorized emergency vehicle has passed.
- (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed.



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CVC Section 21807

Effect of Exemption

The provision of Section 21806 shall not operate to relieve the driver of an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons and property.

Equipment on Vehicles

CVC Section 24002

Vehicle Not Equipped or Unsafe

- (a) It is unlawful to operate any vehicle or combination of vehicles which is in an unsafe condition, or which is not safely loaded, and which presents an immediate safety hazard.
- (b) It is unlawful to operate any vehicle or combination of vehicles that is not equipped as provided in this code.

CVC Section 27305

Firefighting Vehicles

All publicly owned firefighting vehicles designed for and used in responding to emergency fire calls and in combating fires shall be equipped with seat belts for each seat utilized by personnel when such vehicles are being operated. Such seat belts shall comply with requirements established by the department.

Miscellaneous Laws

CVC Section 2801

Obedience to Fire Fighters

It is unlawful to willfully fail or refuse to comply with any lawful order, signal, or direction of any member of any fire department, paid, volunteer, or company operated, when wearing the badge or insignia of a fire fighter and when in the course of his duties he is protecting the personnel and fire department equipment.

CVC Section 2818

Crossing Flare of Cone Patterns

It is unlawful to traverse a flare pattern, cone pattern, or combination thereof, provided for the regulation of traffic, or provided in any situation where public safety personnel are engaged in traffic control or emergency scene management.