Fire Apparatus Manufacturers' Association P.O. Box 397 Lynnfield, MA 01940-0397

TC010

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Standard Product Safety Sign Catalog for Automotive Fire Apparatus

WHITE PAPER

RATIONALE

This document gives the fire apparatus manufacturers an option to provide standardized product safety sign text and artwork for common hazards.

FOREWORD

This document presents safety signs for potential use on fire and rescue apparatus.

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1 SCOPE

This document presents a standardized catalog of safety sign text and artwork that may be used by any apparatus manufacturer to warn of common hazards. It remains the product manufacturers' obligation to furnish adequate warnings and instructions, after consideration of the products specific characteristics and environment of use. A manufacturer may elect to use any of the standardized signs, text and/or artwork contained in this catalog, but no manufacture is required to do so.

2 REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein.

2.1.1 ISO Publications

Available from ANSI, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

- ISO 9244 Earth-moving machinery Machine safety labels General Principles
- ISO 7010 Graphical symbols Safety colours and safety signs Registered safety signs
- 2.1.2 Other Publications
- ANSI Z535.4 American National Standard for Product Safety Signs and labels
- ANSI Z535.6 American National Standard for Product Safety Information in Product Manuals, instructions, and Other Collateral Materials
- NFPA 1901 Standard for Automotive Fire Apparatus

FAMA Product Safety Signs for Automotive Fire Apparatus

NFPA 1906 Standard for Wildland Fire Apparatus

3 DEFINITIONS

3.1 Product Safety Sign

Sign, label, or decal affixed to a product that provides essential information concerning a potential hazard, the degree or level of hazard seriousness, the probable consequence of involvement with the hazard, and how the hazard can be avoided.

4 GENERAL

- 4.1 New proposals for product safety sign ideas should be forwarded to FAMA. The FAMA Product Safety Sign group will consider new ideas at each FAMA technical committee meeting and may add new text and artwork to this catalog as appropriate.
- 4.2 The product safety signs shown in this document are intended as examples for sufficiency of text and graphic size with respect to each hazard, however it is the product manufacturer's responsibility to determine the adequacy of warnings and/or instructions that are provided with the product.
- 4.3 Limitations inherent in some reproduction and display technologies may require increased line thickness or other minor modifications of symbols. Such modifications are acceptable provided the symbol is unchanged in its basic graphical elements and remains easily discernible by the operator.
- 4.4 To improve the appearance and perceptibility of a safety sign, or to coordinate with the design of the equipment to which the sign is applied, it may be necessary to change the line thickness or round the corners of a symbol. The graphic designer is free to make such changes, provided that the essential perceptual characteristics of the symbol are maintained.
- 4.5 Some of the product safety signs included in this document are provided with "textless" two-panel versions developed using the guidelines found in ISO 7010. Where appropriate, these versions could be used in place of the ANSI Z535.4 signs at the option of the manufacturer.
- 4.6 Symbols on controls and displays should have good contrast to their background. Pictorials may use either a light symbol on a dark background or a dark symbol on a light background at the manufacturer's discretion. When a pictorial image is reversed (for example, from black-on-white to white-on-black and vice versa), it should be done for the entire pictorial.
- 4.7 Where used, product safety signs should be located as close as practical to the location of the hazard addressed. Some recommendations regarding sign placement are included in this catalog.
- 4.8 Reference numbers are provided as a convenience to the organization of this document and need not appear on the final product.
- 4.9 Product safety sign graphic thumbnails are provided in this document. Full scale artwork can be downloaded from the FAMA website at <u>www.FAMA.org</u>.
- 4.10 All standard ISO version signs are 6.65 in. tall by 3.35 in. wide.
- 4.11 Font sizes are based on using Microsoft Sans Serif.

5 NFPA APPARATUS STANDARD COMPLIANCE

5.1 The following is a list of the safety signs in this document that specified in the 2016 editions of NFPA 1901 Standard for Automotive Fire Apparatus and NFPA 1906 Standard for Wildland Fire Apparatus:

Торіс	1901	1906
Cab Seating Capacity	FAMA14	
Seat Belts	FAMA07	FAMA07
Seat Not to be Occupied	FAMA06	FAMA06
Fire Service Tire Rating	FAMA12	
Helmets	FAMA15	FAMA43
Equipment Mounting	FAMA10	FAMA10
Ultra High Pressure	FAMA20	FAMA20
Hose Restraint	FAMA22	FAMA22
Access Methods	FAMA23	FAMA23
Riding on the Tailboard	FAMA24	FAMA24
Pump Operator	FAMA25	FAMA25
Winch Receivers and Rope Anchors	FAMA28	FAMA28
Hazards from Stabilizer Motion	FAMA30	
	FAMA31	
	FAMA32	
	FAMA33	
Fall Restraint	FAMA34	
	FAMA40	
Aerial Electrocution from Power Lines	FAMA35	
	FAMA36	
Aerial Capacity	FAMA37	
Ladder Rung Pinch	FAMA38	
Aerial Inspection	FAMA39	
On-Board Pump and Roll		FAMA44
		FAMA45
Aerial Device Pinch	FAMA46	
Aerial Operator Attention Required	FAMA47	

6 SAFETY SIGN TEXT AND ARTWORK

Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA01	Battery Explosion	Visible to personnel near batteries.	3.0 x 4.0	12	Image: Additional content of the product of the pr	FAMA01G
FAMA02	Rotating Shafts	One sign each side of vehicle on the frame rail, and any other place where rotating shaft hazard is apparent.	3.0 x 4.0	14	Andress Andress Rotating Shaft Hazard. Keep body, hands, hair, clothes, away. Do not work around shafts with engine on. Rotating parts will injure or kill.	FAMA02G
FAMA03	Hot Surface	Near hot surfaces	2.0 x 5.0	18	A WARNING Burn Hazard. Do not touch. Hot surface can burn skin.	FAMA03G
FAMA04	Hot Exhaust - Horizontal Muffler	Visible to personnel approaching the hot exhaust parts.	3.5 x 3.5	14	Exhaust gets extremely HOT without warning. KEEP AWAY from exhaust gas. Do NOT Touch pipes or parts. Do not park near flammable objects. Whete and gas may burn skin or start fires.	

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA05	Spinning Fan	Visible to personnel at each approach to spinning fans.	3.0 x 4.0	14	Image: Constraint of the state of	FAMA05G
FAMA06	Seats Without Belts Not Occupied	Visible to each occupant where seating positions without seat belts are present.	2.0 x 3.0	14	Cash Hazard This seat is not to be occupied With vehicle is in motion. Seats without belts are for use With vehicle parked only. Unbelted occupants are at greater risk of injury or death in FMAMS Do not paint over this label. Replace if damaged or lost.	FAMA06G
FAMA07	Seated and Belted	Visible to any occupant.	2.0 x 3.0	9	Crash Hazard Occupants must be seated and beted when vehicle is in must. We only OEM approved belts. Unbelted occupants are at greater risk of injury or death in a crash.	FAMA07G
FAMA08	Swivel Seat Unsecured	Visible to occupant of swivel seat.	1.9 x 3.1	10	A warping Seat Swivel Hazard Lock seat in position before uck seat in position before U	FAMA08G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA09	Air Conditioning Refrigerant	On or near air conditioning unit where mechanic would be apt to find it.	2.0 x 5.0	10	Image: Contract of the system contains R134A Avid breakting refrigerant and lubricant vapor or mist. The conditioning System Contains R134A Avid breakting refrigerant and lubricant vapor or mist. The conditioning System Contains R134A. Avid breakting refrigerant and lubricant vapor or mist. The conditioning System Contains R134A. Avid breakting refrigerant and lubricant vapor or mist. The System Contains refrigerant and lubricant vapor or mist. The System Contains refrigerant and lubricant vapor or mist. The System Contains refrigerant and lubricant vapor or mains. Description Contains refrigerant and lubricant vapor or mains. Additionation many be obtained from refrigerant and lobricants. Exposure may initiate eyes, nose and throat. XMAX To not paint over this labet. Replice f damaged ar lost.	FAMA09G
FAMA10	Cab Equipment Mounting	Visible to operator inside the cab.	2.0 x 3.0	8	Figure 2	FAMA10G
FAMA11	SCBA Seat Insert	Visible to operator inside the cab.	2.0 x 3.0	8	Control Control <t< td=""><td>FAMA11G</td></t<>	FAMA11G
FAMA12	Fire Service Tire Rating	Visible to operator inside the cab.	2.0 x 3.0	8	Cash Hazard Tires subject to fire-service ratings. Tires properly inflated. See Operator's Manual for instructions. Tires hy failed tire may injure or kill. FAMA12 Do not paint over this label. Replace if damaged or lost.	FAMA12G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA13	Electronic Stability Control	Visible to operator inside the cab.	2.0 x 3.0	10	Crash Hazard. This vehicle equipped with leetronic Stability Control (ESC). ESC does not eliminate the need to drive safely. Faiure to comply will injure or clinet.	FAMA13G
FAMA14	Cab Seating	Visible to operator inside the cab. Fill in blank with number of belted seating positions.	2.0 x 3.0	14	EXAMPLE A set of the	FAMA14G
FAMA15	Helmet Worn in Cab	Visible from each seating location	2.0 x 3.0	10	Crash Hazard Do not wear helmet while Sectors head or neck injury may result from helmet use in Cable Failure to comply may injure or FAM15 Do not paint over this label. Replace if damaged or lost	FAMA15G
FAMA16	Deployable Steps	Visible at step locations.	2.0 x 3.0	14	Image: Constraint of the second se	FAMA16G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA17	Vehicle Backing	Visible to the driver while sitting in the driver seat.	2.0 x 3.0	9	Backing Hazard. Backing Hazard. Ensure that personnel are clear before driving in reverse. Always use a spotter when backing. Failure to comply may injure or kil.	FAMA17G
FAMA18	Intake and Discharge Cap Pressure	One sign on each side and back of vehicle where caps are present.	3.5 x 3.5	12	Image: Constraint of the second se	FAMA18G
FAMA19	Foam Type Mixing	Near Foam Controls	1.9 x 3.1	8	Foam Failure Hazard Do NOT mix brands and Upper of foam concentrate. Mixed concentrate may fail to Image: Strength of the strengt of the strength of the strength of the strengt of the	FAMA19G
FAMA20	Ultra High Pressure Water	Visible to a person in front of the turret. Visible to turret operator. Visible to fire fighter preparing to use any hand line.	2.1 x 5.2	10	Mark Description With High Pressure Water Hazard. High Pressure Water Hazard. Hop ressure water will injure people and pierce skin. Never place body parts in stream Were place body parts in stream. Never place body parts in stream. Were place body parts in stream. Never place body parts in stream. Were place body parts in stream. Never place body parts in stream. Were place body parts in stream will injure or kill. Never place body parts in stream will injure or kill.	FAMA20G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA21	Rotating or Swinging Parts	One sign near each crush point.	3.0 x 5.0	18	Image: Constraint of the second se	FAMA21G
FAMA22	Hose Restraint Required	Near each hose storage area	1.9 x 3.1	10	Image: Market Science Image: Science	FAMA22G
FAMA23	Access Step Method - Small	Visible to personnel preparing to climb onto or enter vehicle.	3.5 x 3.5	10	Key WARRNING Field hazard March and the classifier March and and classifier	FAMA23G
FAMA24	Riding on exterior	On the vehicle at the rear step areas and at any cross walkways"	3.5 x 3.5	16	A WARNING Image: Constraint of the state of	FAMA24G
FAMA25	Trained Personnel Only - NFPA Required	Visible at pump operator's station and Aerial operator's platform. For apparatus without a pump or aerial device, locate this sign in a prominent location visible to operating personnel.	2.7 x 6.6	10	Constraints of the sequence of the sequen	FAMA25G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA26	No-Step	On any horizontal surface that would be tempting to step on but that is not provided with slip resistant surface and grab handles.	3.5 x 3.5	12	Fall Hazard - Railings NOT provided Surface may be slippery - NOT intended for stepping, standing or walking. Fall will injure or kill.	FAMA26G
FAMA27	Breaker Box Warning	Visible to personnel accessing electrical panel.	1.9 x 3.1	8	Description Electrical Shock Hazard Disconnect power before removing this cover. Biolow National Electrical Code afe practices. Bictrical shock can injure or kill. Bictrical shock can injure or kill.	FAMA27G
FAMA28	Rope Tie-Down 9000	Near each rope anchor	1.9 x 3.1	8	Anchor Failure Hazard Or Do NOT exceed 9,000 lb O not lift on anchor Flying parts and whipping ropes may injure or kill.	FAMA28G
FAMA29	Hydraulic High Pressure Leaks	One label per vehicle in a conspicuous area near the majority of the hydraulic lines or components.	3.0 x 5.0	10	<section-header>ControlCont</section-header>	FAMA29G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA30	Stabilizer Crush	Visible to person standing near each stabilizer Visible to stabilizer deployment operator.	3.5 x 3.5	12	Image: Construction of the second	FAMA30G
FAMA31	Stabilizer Pins & Pads	Visible to stabilizer deployment operator.	3.0 x 5.0	14	Acrial Stability Hazard Before operating aerial device: • Set up on firm surface only • Place pads beneath stabilizer jacks • Extend stabilizer beams and lower jacks onto pads • Secure jacks with pins Failure to comply may injure or kill.	FAMA31G
FAMA32	Stabilizer Pads	Visible to stabilizer deployment operator.	3.0 x 5.0	14	Matrix Warning Acrial Stability Hazard Before operating aerial device Before operating aerial device Set up on firm surface only Place pads beneath stabilizer jacks Place pads beneath stabilizer jacks Extend stabilizer beams and lower jacks onto pads Failure to comply may injure or kill.	FAMA32G
FAMA33	Stabilizers Not extended	Visible to stabilizer deployment operator.	0.9 x 2.1	10	Stability Hazard. Stabilizers not fully extended.	FAMA33G
FAMA34	Fall Restraint Required.	One sign near base of ladder. One sign visible in platform.	3.0 x 5.0	18	Image: Warning	FAMA34G

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA35	Aerial Electrocution Small Size	Visible to aerial and pump operator.	3.0 x 5.0	10	Constraint Constraint Image: Straint Straint Straint Straint Image: Straint Straint Straint Image: Straint Straint </td <td>FAMA35G</td>	FAMA35G
FAMA36	Aerial Electrocution Large Size	Visible to personnel on aerial apparatus approaching vehicle from either side and back.	6.0 x 8.0	18	Control	FAMA35G
FAMA37	Aerial Device Load Capacity	Visible to aerial operator at turntable, in the platform, and at tip controls.	3.0 x 5.0	12	Image: Non-Structural Failure Hazard	FAMA37G
FAMA38	Aerial Ladder Rung Pinch	One sign visible to personnel operating tip controls. One sign visible to Aerial Operator.	1.9 x 3.1	10	Pinch Hazard. Weep feet on folding teps. Keep hands off rungs. Moving rungs can pinch and crush.	FAMA38G

Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA39	Aerial Inspection	Visible to operator at turntable.	2.0 x 3.0	10	Control Control Control <	FAMA39G
FAMA40	Fall Protection Anchor	Next to fall protection anchor.	1.0 x 2.0		FAMA40	FAMA40G
FAMA41	Cab Tilt	Inside of driver cab door	2.0 x 3.0	10	A WARNINGWith the second	FAMA41G
FAMA42	Siren Noise	Inside of driver cab door	2.0 x 3.0	9	A warp of the second	FAMA42G
FAMA43	Helmet Worn in Cab	Visible from each seating location	2.0 x 3.0	10	Crash Hazard Do not wear helmet while seated unless necessary during suppression operations. Serious head or neck injury may result from helmet use in cab. Failure to comply may injure or kill.	FAMA15G

Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA44	Pump and Roll Fire Fighting Position - Exterior	One sign visible from the pump-and- roll firefighting position	3.5 x 3.5	14	A WARNINGA WARNINGA WARNINGA Warning ControlA Warning ControlStay seated and belted while vehicle is in motion.A Do not use above 10 mph.A Do not use 10 mph.A Do not use 	SPEED LIMIT 10
FAMA45	Pump and Roll Fire Fighting Position - Driver	One sign visible from the drivers position or visible to the driver while entering the cab	2.0 x 3.0	10	Speed Imit 10 Speed Imit 10 With exterior seat occupied: Stay clear of fire. Never exceed 10 mph. Never drive unless occupant is seated and belted. Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10 Speed Imit 10	
FAMA46	Aerial Device Pinch	One sign on aerial device visible to personnel on the turntable at the foot of the device	1.9 x 3.1	10	Pinch and Crush Hazard. Keep hands and body clear of moving parts. Failure to comply may rigure or kill.	

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Ref Number	Hazard	Location	Size (in.)	Font Size	ANSI Version	ISO Version
FAMA47	Aerial Device Operator Attention Required	Visible to aerial operator at turntable, in the platform, and at tip controls	3.0 x 5.0	12	Operator Attention Required Trained operator must remain at primary controls any time there are personnel on the device. Do not operate this device using platform or tip controls without a trained operator at the primary controls at all times. Be alert for changing conditions and be prepared to remove device personnel from danger. Failure to comply may injure or kill.	

7 REVISIONS

Date	Safety Sign	Description of Change
09/19/2013	FAMA30	Changed term from "jacks" to "stabilizers". Added second pictograph panel for staying away from hazard. Changes made at the request of NFPA 1901/1906 Aerial Task Group.
09/19/2013	FAMA39	daily, frequent, and annual inspections <u>and maintenance</u> . Change made at the request of NFPA 1901/1906 Aerial Task Group.
02/11/2014	FAMA13	Changed the graphics for consistency with W09 and J14 from SAE J2402. Increased font size from 8 to 10.
02/11/2014	FAMA16	Added deployable step symbol 2572 from ISO 7000. Increased font size from 12 to 14.
02/11/2014	FAMA40	Revised the image of the hook to be consistent with typical safety harness hooks.
02/11/2014	ISO Symbols	Added ISO text-free safety signs FAMA04G, FAMA06G, FAMA08G, FAMA09G, FAMA10G, FAMA11G, FAMA12G, FAMA13G, FAMA14G, FAMA16G, FAMA17G, FAMA19G, FAMA20G, FAMA21G, FAMA28G, FAMA36G, FAMA39G, FAMA40G, FAMA41G, and FAMA42G.
10/03/2014	FAMA44, 45	New NFPA 1906 Pump and Roll Fire Fighting Position signs.
10/03/2014	FAMA46	New pinch and crush warning sign for aerial device turntable position.
10/03/2014	FAMA47	New aerial primary operator attention required warning
04/07/2016	FAMA25	Added reference to NFPA 1962
04/07/2016	Table	Updated text and table to reflect changes due to the 2016 editions of NFPA 1901 and 1906