

NOTICE OF CHANGE
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INCH-POUND
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MIL-STD-1180B  
Notice 1  
7 August 1991

MILITARY STANDARD

SAFETY STANDARDS FOR MILITARY  
GROUND VEHICLES

TO ALL HOLDERS OF MIL-STD-1180B:

1. THE FOLLOWING PAGES OF MIL-STD-1180B, HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

<u>NEW PAGE</u>	<u>DATE</u>	<u>SUPERSEDED PAGE</u>	<u>DATE</u>
iii	20 Sept 1986	iii	Reprinted without change
iv	7 August 1991	iv	20 Sept 1986
3	20 Sept 1986	3	Reprinted without change
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5	20 Sept 1986	5	Reprinted without change
6	7 August 1991	6	20 Sept 1986
7	7 August 1991	7	20 Sept 1986
8	7 August 1991	8	20 Sept 1986

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-1180B will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military standard is completely revised or canceled.

4. Changes from previous issue. The margins of this standard are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

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FOREWORD

Although vehicles and equipment manufactured for, and sold directly to, the Armed Forces of the United States in conformity with contractual specifications are specifically exempted from the provisions of the Federal Motor Vehicle Safety Standards (FMVSS), it is the established policy of the Army to comply with the intent of those standards as long as compliance does not degrade essential military characteristics. With the same limitation, compliance with applicable provisions of (Federal) Motor Carrier Safety Regulations (MCSR) is an Army requirement.

This military standard provides guidance to assure proper safety characteristics associated with FMVSS are designed into military vehicles in a consistent manner. In establishing this standard, full consideration has been given to the following constraints listed in order of precedence:

- (a) Military mission requirements.
- (b) Federal Motor Vehicle Safety Standards and Motor Carrier Safety Regulations.
- (c) Requirements of friendly nations within whose borders US vehicles are operated by DoD personnel.

Individual requirements are identified to correspond with comparable FMVSS numbers and the applicable provisions of MCSR are as specified in the detailed requirements.

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## 3. DEFINITIONS

3.1 Wheeled vehicles.

3.1.1 Tactical standard wheeled vehicles. Tactical standard wheeled vehicles are built to Government specifications. They are generally characterized by multiple drive axles, 4 x 4, 6 x 6, 8 x 8, etc., and are capable of off-road operation over fairly rough terrain. Most of these vehicles have deep-water fording capabilities. They are designed to overcome ditches and obstacles in operation, and are also capable of operating on public highways at normal highway speeds, in most cases without escort.

3.1.2 High mobility tactical wheeled vehicles. High mobility tactical wheeled vehicles are expressly designed and built to Government specifications for the purpose of handling cargo while negotiating very rough terrain. All axles are driven and, generally, the vehicles are amphibious. They are capable of operating in deep mud or snow, are often articulated, and are seldom capable of maintaining normal highway speeds. They are usually operated in convoy on public highways. The relatively few high mobility vehicles capable of highway speeds and operated without escort comply with the same Basic Issue Items (BII) regulations as do limited mobility vehicles. An example is the M656, 8 x 8, high mobility, 5-ton truck.

3.1.3 Tactical support wheeled vehicles. Tactical support wheeled vehicles are commercial vehicles designed and built by a manufacturer that usually incorporate modifications to the standard commercial version to satisfy specific military requirements. These vehicles are intended to be used to the brigade rear and operate on public highways without escort.

3.1.4 Combat wheeled vehicles. Combat wheeled vehicles are lightly armed, armored, and operate on public highways under extreme emergencies. They are primarily used for riot control.

3.1.5 Trailers. Trailers are unpowered wheeled vehicles incapable of independent operation but are capable of hauling large loads when attached to a prime mover. They generally operate on highways but may operate off road under good conditions.

3.2 Tracked vehicles.

3.2.1 Tactical tracked vehicles. Tactical tracked vehicles are cargo type vehicles designed for very rough terrain operation, they are usually unarmed, unarmored, and too slow for unescorted highway use.

3.2.2 Combat tracked vehicles. Combat tracked vehicles are characterized by armor plating, armament, and considerable weight. They are not designed as cargo carriers and seldom operate alone on public highways in peacetime.

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3.3 Construction equipment and material handling equipment vehicles (CE/MHE). The CE/MHE class of vehicles is characterized by an automotive chassis being utilized to transport special-purpose equipment. These vehicles are designed for highway travel. This class includes mobile cranes, dumpsters, distributors, and other special-purpose vehicles. Equipment designed for off-highway usage such as bulldozers, earthmoving equipment, graders, and fork lifts will comply with the applicable Federal regulations that cover such equipment.

3.4 Military motorcycle. Military motorcycles are vehicles designed for either off- or on-road operation. These vehicles are characterized as having a seat or saddle for the rider and designed to travel on two or three wheels.

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4. GENERAL REQUIREMENTS

4.1 Application. All military ground vehicles, delineated in vehicle specifications, shall be equipped with safety devices as specified herein. The provisions of this standard shall not be construed to prohibit any agency of the Federal Government from prescribing safety standards with requirements greater than those prescribed in this standard. Specific elements of these standards may be waived when the acquisition activity, in coordination with the combat development and user communities, determines that application would degrade essential military characteristics.

4.2 Recycled, virgin, and reclaimed materials. The use of recycled materials which meet the requirements of the applicable item or part without jeopardizing its intended use shall be encouraged.

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5. DETAILED REQUIREMENTS

5.1 Safety devices. Particular safety devices shall comply with the requirements as specified in the detailed requirements covering such devices. The applicable individual requirements are as listed in the issue of this standard in effect on date of invitation for bids or request for proposals.

5.2 Military ground vehicle safety requirements.

5.2.1 Type I. All military wheeled ground vehicles shall comply with the safety requirements specified in table II.

5.2.2 Type II. All military tracked ground vehicles shall comply with the safety requirements specified in table III.

5.2.3 Type III. All military motorcycles shall comply with the safety requirements specified in table IV.

5.3 Individual safety requirements. Individual safety requirements follow section 6.



TABLE II. Safety requirements for military wheeled ground vehicles (type I).

Rqmt. no.	Title	Vehicle Rqmt. application			Referenced documents					
		1/	2/	3/	FMVSS No.	MCSR Part	FED-SPEC No.	MIL-SPEC No.	MIL-STD No.	SAE No.
101.1	Controls and displays	X	X		101				1472	
102.1	Transmission shift lever sequence, starter interlock and transmission braking effect	X	X		102					
103.1	Windshield defrosting and defogging systems	X			103					J381 J382 J198
104.1	Windshield wiping and washing systems	X	X		104	393				
105.1	Hydraulic brake systems	X	X	X	105	393				
106.1	Brake hoses	X	X	X	106			H-3992 H-13719 C-46168 C-52798	193	
107.1	Reflective surfaces for components in the driver's field of view	X	X	X						
108.1	Lamps, reflective devices and associated equipment	X	X	X					1179	
111.1	Rearview mirrors	X	X		111					
113.1	Hood latch systems	X	X		113					
116.1	Hydraulic brake fluids	X	X	X			VV-B-680	B-46176		
119.1	New pneumatic tires	X	X	X	119			T-12459		
120.1	Tire and rim selection for motor vehicles	X	X	X	120					
121.1	Air brake systems	X	X	X	121					
124.1	Accelerator control systems	X	X		124					
125.1	Warning devices	X					RR-W-1817			

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TABLE II. Safety requirements for military wheeled ground vehicles (type I) - Continued.

Rqmt. no.	Title	Vehicle Rqmt. application			Referenced documents					
		1/	2/	3/	FMVSS No.	MCSR Part	FED-SPEC No.	MIL-SPEC No.	MIL-STD No.	SAE No.
201.1	Occupant protection in interior impact	X			201					
203.1	Impact protection for the driver from the steering control system	X			203					
204.1	Steering control rearward displacement	X			204					
205.1	Glazing materials	X	X		205					
206.1	Door locks and door retention components	X			206					
207.1	Seating systems	X			207					
208.1	Occupant crash protection	X	X		208					
209.1	Seatbelt assemblies	X	X	4/	209				1472	
210.1	Seatbelt assembly anchorages	X	X	4/	210					
212.1	Windshield mounting	X	X		212					
219.1	Windshield zone intrusion	X			219					
301.1	Fuel system integrity	X	X		301	393				
302.1	Flammability of interior materials	X	X		302		CCC-C-419			

NOTE: 1/ Tactical standard, high mobility tactical, and tactical support wheeled vehicles.  
 2/ Combat wheeled vehicles.  
 3/ Trailers.  
 4/ When specified by the acquisitioning activity.

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