

DEPARTMENT OF TRANSPORTATION**National Highway Traffic Safety Administration****49 CFR Part 571****[Docket No. 03-14483, No. 1]****RIN 2127-AH79****Federal Motor Vehicle Safety Standards; Brake Hoses**

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking.

SUMMARY: Pursuant to the agency's grant of a joint petition from Elf Atochem North America, Inc., Mark IV Industrial/Dayco Eastman, and Parker Hannifin Corporation, NHTSA proposes to update the Federal motor vehicle safety standard on brake hoses to incorporate the substantive specifications of several Society of Automotive Engineers (SAE) Recommended Practices relating to hydraulic brake hoses, vacuum brake hoses, air brake hoses, and plastic air brake tubing.

DATES: Comments must be received on or before July 14, 2003.

ADDRESSES: Comments should refer to the docket number above and be submitted to: Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590. Alternatively, you may submit your comments electronically by logging onto the Docket Management System (DMS) Web site at <http://dms.dot.gov>. Click on "Help & Information" or "Help/Info" to view instructions for filing your comments electronically. Regardless of how you submit your comments, you should mention the docket number of this document.

You may call the Docket at 202-366-9324. Docket hours are 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: For non-legal issues, Mr. Jeffrey Woods, Vehicle Dynamics Division, Office of Vehicle Safety Standards (Telephone: 202-366-6206) (Fax: 202-366-4921). Mr. Woods' mailing address is National Highway Traffic Safety Administration/DOT, NPS-22, 400 Seventh St., SW., Washington, DC 20590.

For legal issues, Mr. George Feygin, Office of the Chief Counsel (Telephone: 202-366-2992) (Fax: 202-366-3820). Mr. Feygin's mailing address is National Highway Traffic Safety Administration, NCC-20, 400 Seventh St., SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:**Table of Contents**

I. Background	
II. Joint Petition for Rulemaking	
III. Summary of Response to Petition	
IV. NHTSA's Proposed Revisions to FMVSS No. 106	
A. Hydraulic Brake Hoses	
1. Pressure Test	
2. Constriction	
3. Volumetric Expansion	
4. Whip Resistance Test	
5. Tensile Strength	
6. Water Absorption and Pressure Test, Tensile Strength, and Whip Resistance	
7. Low temperature Resistance Test	
8. Brake Fluid Compatibility, Constriction, and Burst Strength	
9. Ozone Resistance	
10. End Fitting Corrosion Resistance	
11. High Temperature Impulse Test	
B. Air Brake Hoses	
1. Dimensional Requirements	
2. Construction and Labeling	
3. Manufacturer Identification	
4. Constriction	
5. High Temperature Resistance	
6. Low Temperature Resistance	
7. Oil Resistance	
8. Ozone Resistance	
9. Length Change	
10. Adhesion	
11. Air Pressure (leakage)	
12. Burst Strength	
13. Tensile Strength	
14. Water Absorption and Tensile Strength	
15. Zinc Chloride Resistance	
16. End Fitting Corrosion Resistance	
17. Minimum Bend Radius	
C. Vacuum Brake Hoses	
1. Constriction	
2. High Temperature Resistance	
3. Low Temperature Resistance	
4. Ozone Resistance	
5. Burst Strength	
6. Vacuum Deformation	
7. Bend Test	
8. Swell (Fuel Resistance)	
9. Adhesion	
10. Deformation	
11. End Fitting Corrosion Resistance	
D. Plastic Air Brake Tubing	
1. Classification	
2. Dimensions and Tolerances	
3. One Hundred Percent Leak Test	
4. Burst Test	
5. Moisture Absorption	
6. Ultraviolet Resistance	
7. Cold temperature Flexibility	
8. Heat Aging	
9. Zinc Chloride Resistance	
10. Methyl Alcohol Resistance	
11. Stiffness	
12. Boiling Water Stabilization and Burst Test	
13. Cold Temperature Impact	
14. Adhesion	
15. Heat Aging and Adhesion Test	
16. Collapse Resistance	
17. Oil Resistance	
18. Ozone Resistance	
E. Plastic Air Brake Tubing Assemblies and End Fittings	
1. Tensile Strength	
2. Hot Tensile Strength	
3. Conditioned Pull Test	
4. Vibration Leak Test	

5. Proof and Burst Test
6. Serviceability Test
7. Fitting Compatibility Test
8. Constriction
9. End Fitting Dimensional Requirements
10. End Fitting Corrosion Resistance
V. Rulemaking Analyses and Notices
A. Executive Order 12866 and DOT Regulatory Policies and Procedures
B. Regulatory Flexibility Act
C. National Environmental Policy Act
D. Executive Order 13132 (Federalism)
E. Civil Justice Reform
F. Paperwork Reduction Act
G. National Technology Transfer and Advancement Act
H. Unfunded Mandates Reform Act
I. Plain Language
J. Regulation Identifier Number (RIN)
K. Comments

I. Background

This document responds to a joint petition for rulemaking filed on October 30, 1998, by Elf Atochem North America, Inc., Mark IV Industrial/Dayco Eastman, and Parker Hannifin Corporation, three brake hose manufacturers. The petitioners request that certain requirements relating to brake hoses, brake hose tubing, and brake hose end fittings that are presently administered by the Federal Motor Carrier Safety Administration (FMCSA) be incorporated into the brake hose standard that is currently administered by the National Highway Traffic Safety Administration ("NHTSA" or the "agency"). Specifically, the petitioners request incorporation of the requirements in § 393.45 (Brake tubing and hose, adequacy) and § 393.46 (Brake tubing and hose connections) of the Federal Motor Carrier Safety Regulations (FMCSR) into § 571.106 (Brake hoses) of the Federal motor vehicle safety standards ("FMVSS").

Sections 393.45 and 393.46 of the FMCSRs require that brake hose, tubing, and fittings on "commercial motor vehicles" be maintained according to certain specifications adopted by the Society of Automotive Engineers ("SAE"). A "commercial motor vehicle" is defined, in § 393.5 of the FMCSRs, as any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property when the vehicle—

(1) Has a gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,537 kg (10,001 lbs.) or more; whichever is greater; or

(2) Is designed or used to transport more than 8 passengers (including the driver) for compensation; or

(3) Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or