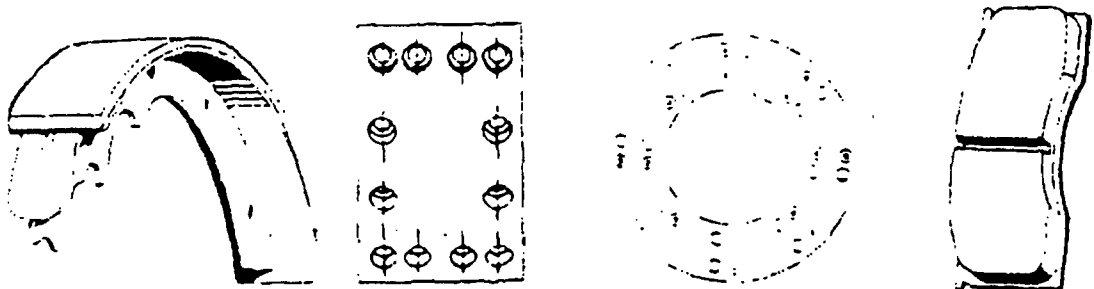
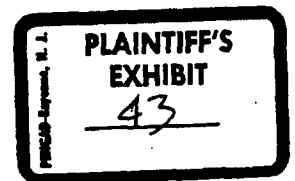


FMSI®



1991



SUPPLEMENT TO THE 1990 AUTOMOTIVE DATA BOOK

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FMSI No.	OD	ID	Thickness	Dr. Diag.	RIVETS Per Plate	Size	N.	FMSI No.	OD	ID	Thickness	Dr. Diag.	RIVETS Per Plate	Size	N.
90148	232 (9.13)	155 (6.12)	3.2 (126)	16 Gr. A. Str	3-	16		10016	273 (10.75)	165 (6.50)	4 (134)	32 DGAP	3-	32	
Chevrolet '88-'89		Pontiac '88-'89						Chevrolet '87-'88							
9038	240 (9.44)	150 (5.91)	3.43 (135)	18 Gr. A. Str		18		10017	254 (10.00)	155 (6.50)	3.43 (135)	18 Gr. A. Str.		18	
Nissan 75 '85								Chevrolet '84-'89							
9039	228.6 (9.00)	155 (6.10)	3.6 (142)	16 Gr. A. Str		16		11004	11-7.2	6-3.4	1.40	40 DGAP	3-	40	
Mercury '89								Chevrolet 66-'89							
10015A	263 (10.35)	165 (6.50)	3.4 (134)	40 DGAP	3-	40		11013	280 (11.00)	190 (7.50)	3.0 (130)	20 Gr. A. Str		20	
Dodge Truck '87-'89		Jeep '87-'89						Ford Truck '89-'91							

RECOMMENDED PROCEDURES FOR REDUCING ASBESTOS DUST DURING BRAKE SERVICING

Friction materials used for brake service may or may not contain asbestos as many suppliers are not labeling asbestos with alternative materials. OSHA regulations for brake servicing refer directly to the asbestos content of friction materials. Since asbestos is a known carcinogen, asbestos fibers are often found in the air. It is suggested that exposure levels be controlled for all replacement friction materials.

1. OSHA regulations on asbestos exposure (29 CFR 1910.1001) require employers to determine the level of asbestos to determine if the workplace is in compliance and if so, what controls must be taken.
 - a. The Permissible Exposure Level (PEL) is 5 fibers per cubic centimeter time weighted average (TWA).
 - b. The Action Level is 1 fiber per cubic centimeter TWA, which activates the standard for exposure assessment.

2. Appendix F of 1910.1001 is a guide for auto brake and clutch repair operations and the 7-26.30 proposal would become mandatory with considerable changes from the past regulation. Three control methods are described which could be used to ensure proper work practices.

3. The engineering controls suggested by the following methods could be used to develop control methods. Use of preformed, ready-to-install, built-in brake lining must be provided, grooved cut bevels or alternated low speeds should always be used to keep down the amount of dust created. A machinery should have an enclosed HEPA-equivalent dust exhaust dust collection system to prevent asbestos exposures and keep the machinery.

4. In certain grinding jobs where concentrations cannot be reduced by the PEL, a respirator program should be used. The OSHA standard specifies a minimum annual fit test and a respirator should be worn when efficiency filters are used. The respirator should be worn when the concentration of asbestos is above the PEL.

engineering controls to reduce dust (See the standard for engineering controls).

Surfaces must be cleaned as soon as possible. Surfaces on which asbestos dust may not be cleaned by the 100% HEPA vacuum cleaners should be used for removing accumulations of dust and waste and water or other suppressants should be applied if brooms are used for dust and standard would require this each day.

5. Good cleaning practices are important in reducing asbestos exposure. Wash before eating, drinking, or smoking. The PEL is exceeded, very specific rules apply. Smoking in asbestos contaminated work areas is prohibited by federal regulation. Wash, store, clean, repair, containers, equipment and machinery containing asbestos must be decontaminated with HEPA vacuum bags or other methods. The following information must be followed.

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

(It is also necessary to comply with state and local regulations)

Product labels must be used by the EPA on products and must be affixed to a asbestos containing product by August 28, 1992.

Consultation with the following Federal regulations:

- 30 CFR 11.101
- 30 CFR 11.102
- 30 CFR 11.103

The following is a guide to assist in clutch and brake service operations. Every effort is made to portray accurate information, however, there are differences, the equipment used, the application, frequently, are different. The following are suggestions.