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DOCUMENT DESCRIPTION: Letter from Liberty Mutual to Ford RE Exposure to Asbestos Dust with Recommended Practices

PLAINTIFF'S EXHIBIT

FD-392

LIBERTY MUTUAL

21040 Greenfield Road, Detroit, Michigan 48237 • Tel. (313) 566-2525

December 29, 1975

Ford Dealer Development
Dealership Presidents

Exposure to Asbestos Dust

8004 1758

Brake linings, pads and clutch assemblies are made of asbestos, which has long been recognized as a material producing a hazard to the health of those who inhale its dust in excessive amounts over a long period of time. During the last few years, however, attention has been focused on the development of cancer of the lung and other body areas following exposure to asbestos dust.

An alert concerning the potential health hazard for persons exposed to asbestos during the servicing of motor vehicle brake and clutch assemblies was issued by the National Institute for Occupational Safety and Health on August 8, 1975. NIOSH cited four cases of rare mesothelial tumors in persons who were employed in jobs involving brake servicing. This rare type of cancer in the membrane around the lung or stomach causes 1 in 10,000 deaths in the general populace. But one study of 632 asbestos workers found that 32 (1 out of 20) had died of this type of cancer. Asbestos also causes lung cancer; and an asbestos worker who smokes is 90 times more likely to get lung cancer.

The full extent of asbestos-related disease in brake servicing personnel is not known because this group has never before been systematically studied. Excessive dust concentrations measured at operations, such as blow-out of automobile drum brake assemblies, grinding of used truck brake linings, bevelling of new truck brake linings, and arcing of new auto brake linings, together with mesothelial tumors in persons so employed, affirms the necessity for effectively controlling the exposure.

At present we do not have complete information on how much exposure, if any, can be tolerated; and so it is important to eliminate exposures whenever possible and minimize those which cannot be eliminated. Recommended practices are listed below.

Wear Respirator:

1. During brake servicing, an air purifying respirator, either single use or with replaceable particulate filters(s), as approved by the National Institute for Occupational Safety and Health NIOSH should be worn during all procedures starting with the removal of the wheels and including reassembly. During manual clutch servicing, such a respirator should be worn during removal and cleaning of the clutch, pressure plate and housing assembly and during installation of the new clutch assembly. This should also include any arcing or riveting operations.

The following manufacturers are known to have NIOSH approved respirators for respiratory protection against asbestos - containing dusts: Mine Safety Appliances Co., 3M Company, Willson Products Division - ESB Inc., American Optical Corp. and Safeline Products.

Use a Vacuum:

2. Dust should first be cleaned from brake drums, brake backing plates, brake assemblies and clutch assemblies using an industrial type vacuum cleaner equipped with a high efficiency filter system. After vacuum cleaning, any remaining dust should be removed using a rag soaked in water and wrung until nearly dry. Under no circumstances should compressed air or dry brushing be used for cleaning.

   It is expected that the required industrial vacuum cleaner will soon be available from Rotunda. The unit will be a modified version of the type shown on page 153 of your 1975 catalog. You will be hearing more on this directly from Rotunda.

Avoid Grinding:

3. Avoid grinding or arcing wherever possible. Some brake repair shops do no grinding at all. When grinding is performed the grinding (arcing) machine should be equipped with local exhaust ventilation. At a minimum, the dust bag of the arcing machine should be removed and replaced with the hose of the high efficiency industrial vacuum described above.

Cleaning:

4. All floor cleaning in areas, where brakes and clutches are repaired should be done with the high efficiency industrial vacuum cleaner as described above. Grinding (arcing) machines should also be cleaned with such a vacuum cleaner and any remaining dust wiped with a damp cloth. An approved respirator, as previously described should be used during this cleaning.

In addition to those measures NIOSH also recommends the following procedures:

a. If possible, an area should be designated for all brake and clutch repairs. Entrance into the area should be posted with an asbestos warning sign.

b. Industrial vacuum cleaner bags containing asbestos and cloths used for wiping brake and clutch assemblies should be resealed in plastic bags and labeled that the contents contains asbestos fibers. During removal of vacuum bags, and approved respirator should be worn.

c. OSHA regulations also include special requirements for the use and handling of clothing. Adherence to the procedures outlined in items 1 through 4 should minimize contamination of work clothing, but care should be taken to prevent the continuation of the asbestos exposure from dirty clothes.

Our local Loss Prevention representative and/or industrial hygienist can provide you with additional information or answer your questions.

R. G. Rosslip
Loss Prevention Account
Representative

T. J. Slavin
Industrial Hygienist

8004 1759 PQ

February 11, 1976

Data Sheet

Asbestos Efficiency Test

American Cleaning Corporation Vacuum Cleaner

Remarks	Concentration of Fibers Greater than 5 Microns in Length/Milliliters of Air
OSHA 8 hour Threshold Limit Value	5
" " " " " " effective July 1, 1976	2
Test No. 1	
1. Operator breathing zone air sample	3.4
2. North general air sample	7.0
3. South general air sample	3.7
Test No. 2	
1. Operator breathing zone air sample	1.4
2. North general air sample	2.7
3. South general air sample	3.7
Test No. 3	
1. Operator breathing zone air sample	1.7
2. North general air sample	3.9
3. South general air sample	5.7

Note: Room size 880 ft^3 - samples taken equidistant from vacuum cleaner

Instrumentation: MSA Model G pumps and Millipore membrane type AA37mm filter

Analysis: 430X Phase microscopy by Kettering Laboratories, University of Cincinnati Medical Center

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2/11/76