

March 29, 1973

Plans are under way to select an appropriate drilling machine to launch our program to provide drill tool life versus machining condition data for the tool economics analysis project.

Personnel: Cowell, Stauffer

AO4 VEHICLE SAFETY

Friction Materials (R-120 R)

PLAINTIFF'S EXHIBIT

FD-737

1. 1975 Disc Brake Lining Development

One set of our experimental disc brake linings has been installed in a Ford Station Wagon for general durability testing at the MPG. The remaining samples of this formulation are to be used for dynamometer and vehicle testing to the FMVSS 105a schedule on a Mark IV as soon as equipment is available.

Bendix now has tested three combinations of linings and brakes which permit our heavier vehicles to pass the 105a tests. They performed over 1000 double-ended dynamometer simulations, in addition to numerous vehicle tests to develop these systems. The high cost of new friction material development and the need for development of complete brake systems to meet the new Federal Standards has led Johns Manville to discontinue all friction material manufacturing. Borg-Warner is considering a similar action regarding brake linings. Neither Johns Manville nor Borg-Warner are current brake lining suppliers to Ford.

A designed experiment is in progress to develop a four-wheel disc brake lining. The primary goal is to provide improved customer performance, in addition to meeting the 105a requirement. Initial results indicate that a means will have to be found to control Forsterite formation at high power densities and high disc temperatures.

Personnel: Anderson, Johnson

Weintraub (Chemical Engineering Department)

8003 0301

PRODUCED BY FORD

SCF-ALLF-04490