

Eaton
Axles & Brakes

Eaton Corporation
Axle & Brake Division
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February 5, 1988

Mike Brooks
Chief Engineer
Oshkosh
2307 Oregon Street
P.O. Box 2566
Oshkosh, WI 54903

Dear Mike:

On December 2, 1987, you wrote me regarding HEMTT coined and non-asbestos brakes. In order for you to propose this change to the U.S. Army, I offer the following.

EATON

- 1) New Eaton part numbers were assigned to correspond with new Oshkosh part numbers and are shown on attached chart. These new brakes include non-asbestos linings and coined shoes.
- 2) A new coining operation was implemented to obtain a greater consistency in final component geometry and a subsequent reduction in variation in brake torque output. The coining of the shoe assembly returns the shoe to the desired radius after distortion by the weld process. To further assure optimum lining to drum contact for all possible conditions, both the shoe radius and the radius tolerance were reduced 0.010 inches (see Fig. 1).

By controlling the self energizing forces generated by pressure distributions surrounding the initial contact point of the lining to the drum, a significant reduction in brake to brake variation is achieved while output torques remain within the band of the original, non-coined, configuration (Figs. 2-4). Because vehicle stopping distances are controlled by the initial lock up of a single wheel, this new brake output consistency permits improved performance with reduced premature lockup.

- 3) The cost impact will add \$6.42 per brake assembly.
- 4) We would like to introduce this change effective June 1, 1988. At that time, our inventory of asbestos linings should be depleted.

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