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Date: January 8, 2001

To: Gus Aramayo
Srdan Simunovic

From: Edgar Lara-Curzio
Chris. O. Stevens
Randy Parten

Subject: **Evaluation of Mounts.**

Happy New Year.

We finally had a chance to complete the evaluation of the motor and transmission mounts. We followed the same testing protocol used to evaluate the first mount which is described in Figure 1. The tests were repeated three times to test for reproducibility of the results and to determine if any permanent deformation had occurred in the mounts.

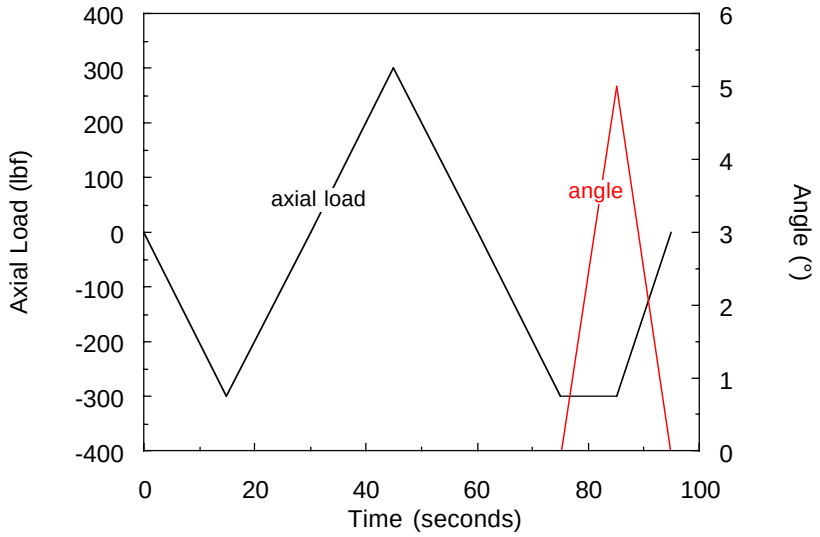

Figure1. Test protocol used for the evaluation of the transmission and motor mounts.

Figure 2 is a photograph of the test set-up used for the evaluation of the second mount. Note that both the axial and torsional actuators are connected to the lower plate. The results in the form of axial load versus axial displacement, and torque versus angle are included in Figure 3 and 4. The results in Figure 3 show that although the behavior of the mount is non-linear, it is repeatable.

During the test of Mount #2 there was so much elongation during the tensile segment of the test, that small rubber particles came off during the test.

Figure 5 shows the experimental set-up used for the evaluation of the third mount, and the results from these tests are presented in Figures 6 and 7.
I have attached to the e-mail message six files associated with these tests.

Please do not hesitate to call me if you have any questions.

Figure 2. Test configuration for the evaluation of mount #2.

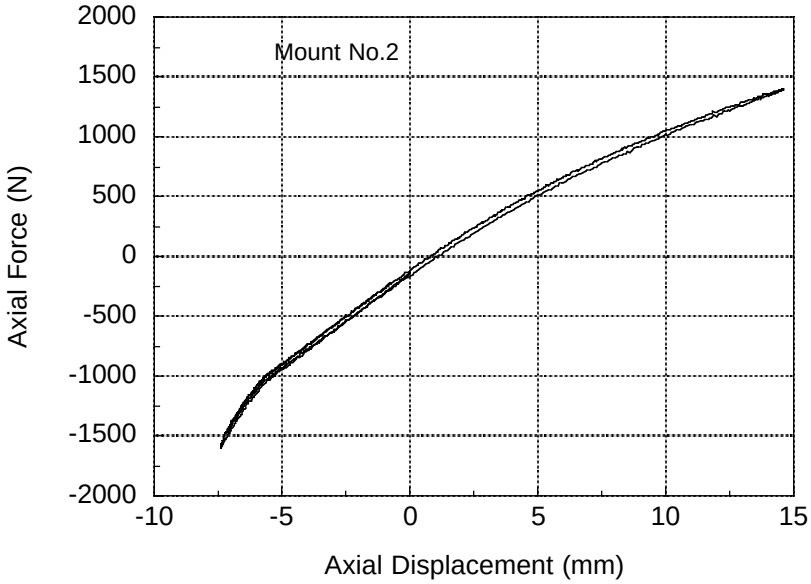

Figure 3a. Axial load versus axial displacement results from first evaluation of Mount #2..

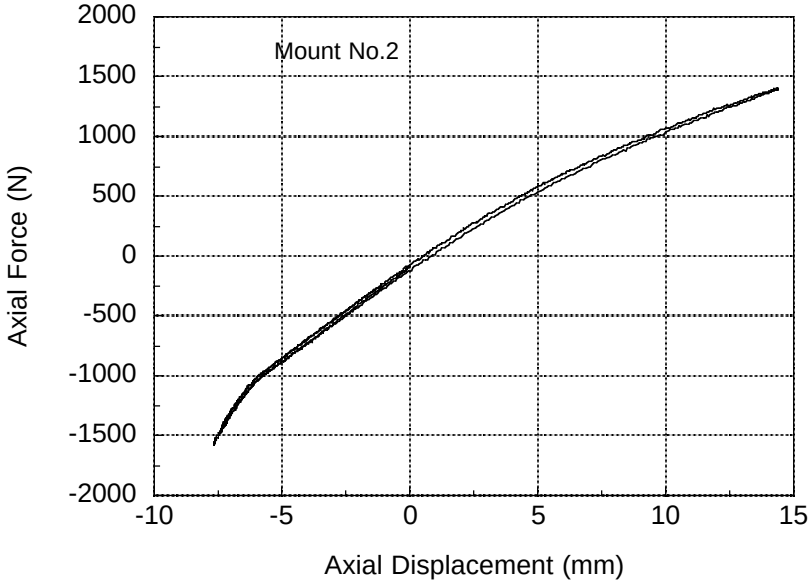

Figure 3b. Axial load versus axial displacement results from second evaluation of Mount #2.

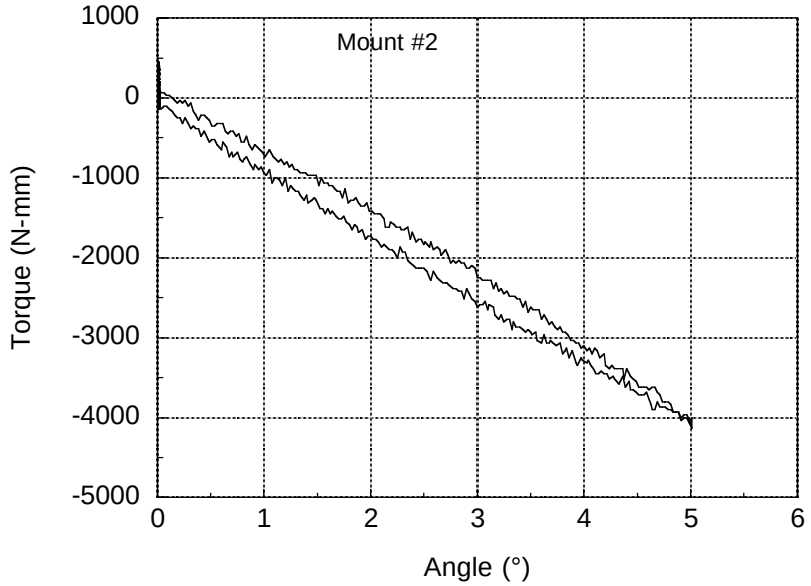

Figure 4. Torque versus angle results during the first evaliation of Mount #2.

Figure 5. Test configuration for the evaluation of mount #3

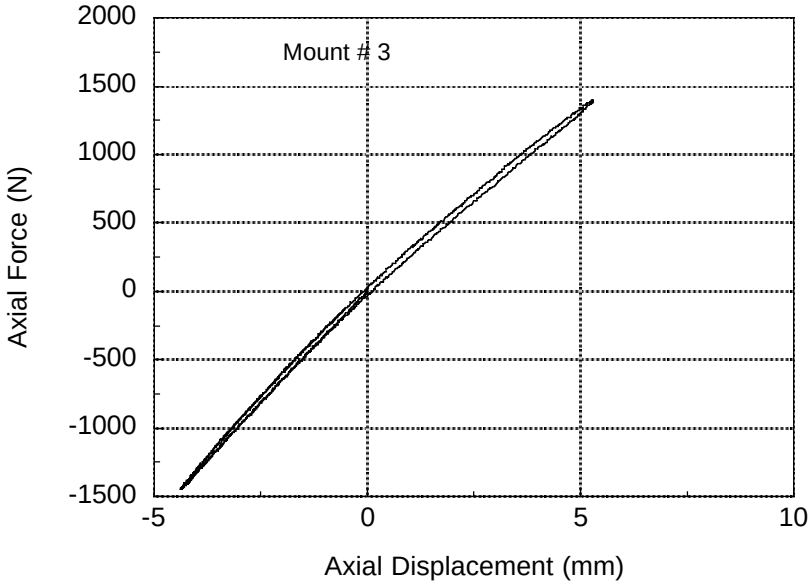

Figure 6a. Axial load versus axial displacement results from first evaluation of Mount #3..

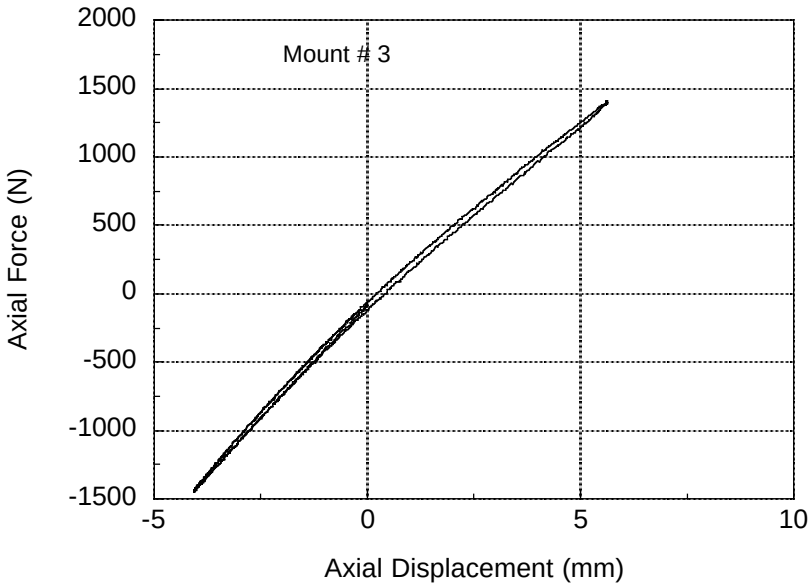

Figure 6a. Axial load versus axial displacement results from third evaluation of Mount #3..

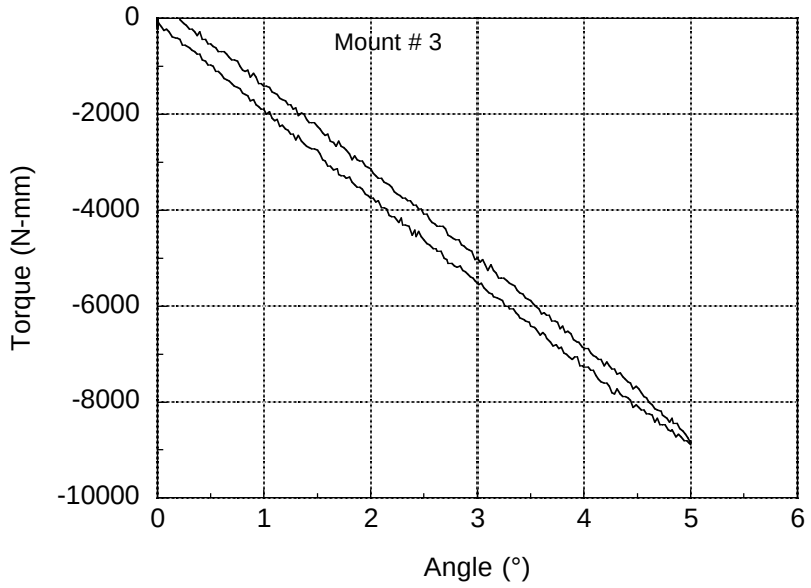

Figure 7. Torque versus angle results during the first evaliation of Mount #3.