December 8, 2000

HSA-1/CC65A

Mr. Dave Gertz Director of Engineering TrafFix Devices, Inc. 220 Calle Pintoresco San Clemente, California 92672

Dear Mr. Gertz:

In your November 16 letter to Mr. Richard Powers of my staff, you asked for an opinion on whether or not a design change to your Scorpion 10,000 Truck Mounted Attenuator (TMA) would require additional crash testing to verify its test level 2 (TL-2) or test level 3 (TL-3) acceptability. The proposed change consisted of replacing the original ½-inch (13-mm) thick aluminum diaphragms and hinges with 1/4-inch (6.5-mm) steel diaphragms and hinges having the same dimensions. These components are identified as parts numbered 3, 4, 8, 9, and 29 on the enclosed drawing. This modification increases the total TMA weight by approximately 80 pounds (36 kg).

Since the original diaphragms were not noticeably deformed in the certification tests and the slight increase in weight is not likely to affect occupant impact velocities significantly, it is my opinion that your proposed design modification is unlikely to change the crash performance of the Scorpion 10,000 TMA. Therefore, the change from aluminum diaphragms to steel diaphragms will not require additional testing. However, I do suggest that the field performance of the modified Scorpion 10,000 be monitored to ensure that this change does not have any effect on the long-term durability of your TMA.

Sincerely yours,

(original Signed by David M. Smith)

for Frederick G. Wright, Jr. Program Manager, Safety

Enclosure



Fig. 1