



24 February, 2015

To Whom It May Concern:

For NCHRP Report 350 testing of the Scorpion TMA, the host truck was ballasted to approximately 20,000 pounds, the parking brake applied, and the transmission was put in second gear with the engine off. The steering wheels were aligned "straight ahead" (not turned left or right). All of our standard testing for submittal to the Federal Highway Administration (FHWA) was performed this way. Pre-impact position and post impact position were recorded. Forward skid/roll was documented. We have performed additional tests with lower and higher host vehicle weights. These tests were performed to develop an understanding of safe performance for the Scorpion with lighter and heavier host trucks. These additional tests were performed with the steering wheels pointed "straight ahead".

Pointing the TMA host vehicles steering wheels straight ahead should be the default position, unless there is a "sound and reasonable" conscious decision made to deviate. An example of a sound reason would be if the attenuator host vehicle was positioned on a curved road where the having the steering wheels pointed straight could create a dangerous condition if the attenuator were impacted and pushed forward. In this case, angling the steering wheels could be a safer alternative. The decision to deviate from having the steering wheels "straight ahead" must be made on a case by case basis. The decision should be made by the responsible agent (Responsible Engineer) who understands the conditions at the site.

Please contact me at TraFFix Devices Engineering for additional clarification on this if required.

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