From: gmclist-bounces@temp.gmcnet.org on behalf of Charles Aulgur
To: gmclist@temp.gmcnet.org
Subject: [GMCnet] IMPROVING GMC BRAKES
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Recently, there has been another round of discussions about how to improve the braking capability on our GMCs. This seems to come up about once a year and is usually initiated by a relatively new GMC owner or someone that is new to the GMC net. You can change wheel cylinder sizes on the rear drum brakes, change brake shoe material, increase the caliper piston diameter on the front brakes, and put various sizes and types of disc brakes on the rear. None of these modes have much affect on improving the maximum braking capability on our coaches. All they do is shift the braking capability around on the various six wheels. When people make some of theses modifications, they usually experience some improvement in normal braking capability via not having to push as hard on the brake pedal to accomplish similar braking capability. When the GM engineers first designed our coaches they probability reasoned that the weight on the four rear wheels was about the same as a full size chevy station wagon and a good choice would be to use similar size "off the self" brakes on the GMC. They apparently discovered that they had to much braking capability on the rear wheels that was causing wheel sliding and reduced the brake shoe witch from 2 3/4" to the final witch of 2 inches. Braking on the swing arm suspension was totally different from the rear of the chevy station wagon.

The only proven way that I know of to improve GMC rear braking is to element the torquing affect the rear brakes have on the swing arm suspension. I accomplished that by unbolting the disc brake caliper bracket from the swing arm and reacting the braking torque back to the vehicle frame thru a separate reaction bar. This reduces the mid axle wheels from lifting the rear of the coach an allows both rear axle wheels to carry a similar load and similar braking capability. You can review what I did on the GMCWS web site which shows photos of the modification I did, along with video of some of my brake testing that shows my rear mid axle brakes no longer lifts the rear wheel of my coach off the ground. I used to brag that I had the best GMC brakes in the country but I can no longer do that because there is another GMC that will be at the GMCMI rally next week that has a production version of my concept on his coach and he and Jim K will talking and showing how the modification works. So get your orders into Jim K if you want to "really" improve your brakes.

Chuck Aulgur
La Mesa, CA