How Hot is Hot ? ? ?

Because a good braking system can generate plenty of heat, that is a common question. Idler (non-brake) hubs run at about 180 degrees F during normal towing. Disc brake rotor hubs will run even hotter depending on the amount of braking. Temperatures of up to 250 degrees F on the nose of the rotor are not uncommon on long downgrades. These temperatures even on the nose of the hub, are certainly too hot for the touch in many conditions. Normal braking temperatures on the rotor surface can be so high as to be only measurable with a hand held infrared thermometer. If you are concerned that the temperature of your hobs may be running too hot, a good rule of thumb is to compare it to the temperature of the front brakes on the tow vehicle.

Every time you brake you create friction between the disc brake pads and the rotor. This friction is intentionally transferred into heat and can't be avoided. The better the braking, the more heat generated. The ventilating action on the rotors and aluminum wheels on many trailers also absorb and transfer heat very efficiently which helps dissipate heat away form the hubs and bearings.

While much less then the braking heat, the lubricant itself does have some effect on the heat generated and t4ransterred. The new vault hubs use the hybrid-oil as opposed to 50 weight motor oil. Motor oil is formulated for use with sliding friction such as pistons sliding in a cylinder bore. The Hybrid oil was specifically designed for the use with rolling friction, such as the tapper roller bearing in your hubs. The a Hybrid oil has viscosity approaching grease at temperatures between 60 to 90 degrees F. and the viscosity thins out quickly to that close to oil at around 180 degree F. the new Vault hubs do run between 10 an d 15 degrees cooler than the same hub filled with grease.

One difference between the new Vault hubs and the earlier Gold Liquid oil style is that the new style is a pressurized system that is 100% filled with lubricant. The previous oil style was filled with lubricant, and while it did not generate its own pressure it did compensate for pressure build up. We also offered a pressurized and conventional bearing lube grease system, all of which perform very well. The pressurized Vault system offers additional protection of keeping water and other contaminants from entering the hub and bearings.

If you have the new Vault hubs, there is no need for routine service. Your owner manual will tell you when and how to inspect your hubs bearings for end play. If there is no bearing end play and the rear hub seal is not spinning any oil, the system does not need to be serviced.

If you are concerned that you may have brake drag (not good) due to the calipers doing some braking on their own, you can fully extend the actuator on the front of the trailer, jack up the trailer and spin the wheels. There should be just a slight whisper sound. If the wheel is hard to rotate, make sure the reset the brake away cable by pushing on the tab under the front of the actuator (Please see owner's manual). The heat produced by the brakes will not cause any damage to the rest of your system.. Otherwise if you have any questions in regards to the DMP brake system, bearings and axles, please contact DEXTER at 800-854-1905