

Brakes and Towing issues

Re brakes, there are four systems. All horseboxes get the standard inertia braking system which applies to smaller trailers. On top of that there are three servo systems, vacuum, air and electric. A servo system is legally required when the horsebox is heavier than the tow vehicle.

What does this mean. Technically, inertia brakes are applied when the trailer pushes against the truck during braking. This system is legal only if the tow vehicle is heavier than the trailer. If it is not, a servo system should be fitted. A servo system provides power to the brakes independently of the said pushing action, and can also be applied by a manual over-ride control during emergencies such as if the trailer starts to sway excessively, or if a downhill turn is coming up too fast. It then acts like a drag anchor.

Of the three servo systems, air is the most expensive, is for big trucks, and is not used on normal horse boxes. Vacuum is next in line, it is the traditional servo system for horseboxes, but is today virtually obsolete and costs around a whopping R20k for a full system. Also, it will invalidate most new vehicle warranties if installed on the tow vehicle. Electric is now also finally available in RSA, and costs around R12 to 15k for a full system when installed on a new trailer.

Servo is safer than pure inertia brakes, but it is an expensive extra, and the uncomfortable truth is that many rigs transporting horses in practice are not legal in this respect. They have been getting away with it because owners drive extra carefully when towing horses and the authorities have not been policing this matter.

A Sunpacer Jumbo has a mass rating of 2300kg GVM and exceeds many tow vehicles' mass. Most horseboxes are rated at over 2000 kg. In the case of Twin cabs, which have a tare rating probably around 1700kg, a servo system should be used.

If the authorities should start clamping down on rigs needing servo systems, vacuum has the advantage that it can be retrofitted to existing axles at the + / - R20k. Electric brakes, however, are best fitted when the trailer is built from scratch, because the axles are specific. To retrofit electric brakes requires changing axles, making it a more expensive option, but technically it is a more advanced system.

While on brakes and mass (the new word for weight), owners should also be aware of what their vehicles are allowed to tow and what their tow bar ratings are. Here also many rigs are grey, but they are doing the job if you look at the car park. A 3.0 diesel has adequate power to tow a large horsebox, but it may not be complying with mass ratings

The bottom line of this matter is that owners will need to evaluate their rigs for legality and take appropriate action to continue their use in future

Pierre Joubert

Sunpacer Manufacturing cc

pierre@sunpacer.co.za

Cell 074 104 7547

June 2011