

Shock Absorbers



On long trips, shock absorbers are often viewed as the most important minor point. But they are crucial for good road adhesion, specially when the car is heavily loaded. As usual there are many different products on the market; from the cheap spring-built absorber to the professional gas-filled shock absorbers.



For my purpose I opted for an « Old Man Emu » shock absorber. It is resistant to high/low temperature, long-lasting (at least according to the manufacturer) and offers good absorption. In addition the vehicle suspension should also be «hard» to support the absorbers and to get the full benefit. As the rear axle of my Zebra has to carry considerable more weight than the front axle (yes, better balancing of weight would help), I decided for a special solution – two shock absorbers per wheel on the rear side and one shock absorber per wheel on the front side.



My garagist recommended me this custom-built construction and also assembled it. It should lessen the stress for the single absorbers and strengthen stability. Whether it helps or not, I unfortunately cannot tell as I have always driven with this configuration. At least it is accepted by the Technical Control Board (so far).



However, I had two not so pleasant incidents with this construction. In both cases, the two extra mounted lower holdings for the additional shock absorbers were responsible. They were just too weakly dimensioned and cracked under heavy strain. The first time was not so severe (detachment of the wheel, removal of one shock absorber and let the holding weld again to the frame at the next garage in Russia). The second time however, the shock absorber drilled into the inner side of the tire. Result was a hole of 5 cm in diameter that could not be repaired anymore.

Summary: I think this construction brings certainly some advantages regarding stability and road adhesion; specially with heavy loaded vehicles. However, bear in mind that the lower holdings are correctly dimensioned.