## **Swinging Arm**



My Zebra is robustly built and can withstand alsmost all adversenesses. But the spare wheel at the rear door? Mounted on 3 mm steel sheet? And that with underdesigned hinge-joints? In rough environment?

Those who have driven already on rough earth roads know what kind of (shaking) forces act on the structure of the car. Under such conditions, it is only a question of time until the door (including the spare wheel) say goodbye to the vehicle.



There exist various solutions to prevent this from happening. However, most of them have considerable disadvantages. When the wheel is put on the roof (i.e. luggage rack), the balance point is shifted upwards and the vehicle will become unstable in curves under rough conditions. Others see the solution in putting the spare wheel on the hood. On the first glance, it seems to be a practical answer. However, I do not know what happens in a frontal crash and whether driver and passenger security is still guaranteed.



I therefore opted for a swinging arm as my wheel trunk. It is directly attached to the chassis and therefore solidly connected to my Zebra. However, this solution is somewhat more costly than others. The mount costs around 380 Euros (i.e. http://www.stockundstein.com). But I think it's worth the money. Advantages: The spare wheel remains at its designated location and does not stress the rear door. The balance point remains low and the wheel does not block the driver's view.



For sure, even a swinging arm is not indistructable. My colleague experienced a brake of this device after driving for days on rough earth roads. The reason for this was probably a small rusty spot on the swinging arm that weakened its structure. Through all the vibrations it finally cracked. I therefore recommend to check also this part for weak points before a long tour.