

## Civilian Armoured Vehicles (CAVs) The Essence of Protection, Discretion and Mobility

## <u> Rear Cargo Safety – Tie It Down Before It Becomes an Internal Missile.</u>

To be sure, users and uparmouring companies spend many weeks designing and building what is thought to be a civilian armoured vehicle that is safe from known dangers, agile and meets the user's needs.

However, in my many years in this industry, I continue to see that stakeholders ignore the dangers inside the vehicle! And the one of the biggest danger comes from unrestrained items stored in the rear cargo section.

Unrestrained cargo can easily become an internal missile when the vehicle is involved in an incident e.g. collision, rollover or blast.



Some time ago a client asked me to conduct a safety review of this vehicle (left), which was operating in a very hostile environment. It is unfortunately a good example of a very unsafe vehicle. Without too much effort, the unrestrained, and poorly restrained, equipment will end up flying forward in the vehicle cabin and will quite likely cause serious injury to the occupants.

When it comes to duty of care, all stakeholders have a responsibility to ensure that the interior is also designed and built with safety in mind and is fit for purpose.



What is required is a dedicated rear cargo design that incorporates suitably rated shackle points, appropriate containers and netting to provide restraint for tools and first aid kits etc. In addition, suitably rated brackets are needed for all items bolted to the vehicle's internal wall e.g. fire suppression tanks and wheel jack.

A rear cargo barrier can also be used but this will inhibit the ability for passengers to cross load or gain access to escape through the rear cargo. The lesson learned from this is that with a bit of forethought into the rear cargo area design, you can well save the occupants from significant injury.... or worse.

If I can assist you with any aspects of civilian armoured vehicles, please do not hesitate to contact me at **armouredconsulting.com** 

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