

New locking door system for armored vehicles which resists to explosion

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***Abstract:** The French army has remarked since its intervention in modern conflicts weakness in their light armored vehicles call PVP (Petit Véhicule protégé). When they suffer from shock waves of IED (Improvised Explosive Device), their doors open and expose their screw, in shock state, to enemies 'attacks. In order to maintain doors closing and respect STANAG norms for armored vehicles, I had to create a new locking system with time and budget constraints.*

After to have studied weakness of present system and established a model of explosion on ABAQUS which reproduces with damage noticed on PVP, I develop a new closing door. I submitted it to the numeric model established and I propose it to Panhard Defense, company which build PVP. It builds my closing system for testing it with explosives in summer 2013. Test was successful so Panhard Defense build 250 closing system for equip PVP with it.

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