

2016 Maintenance Innovation Challenge

MAK

M978A4 Emergency Battery Disconnect Switch

PROBLEM STATEMENT

Problem: ADR 2016 (Hazardous Cargo Transportation Law in Europe) require a disconnect of any electrical power in case of an emergency, e.g. accident.

Scope: The project focuses on the disconnect of all electrical power on a M978A4 by the driver, in case of an emergency

Goal: Ease disconnect of all electrical power in a M978A4 to reduce the hazards during an accident to a minimum and comply with European laws.

BENEFITS

In compliance with European laws allowing US Fuel Tankers to cross borders of 48 European countries without any special authorizations

Return on Investment (ROI):

Primarily intangible, while preventing any diplomatic clearances and special approvals while crossing borders in Europe, e.g. ANAKONDA participation.

Furthermore considerable are the reduced safety risk in case of an accident with such a Heavy truck filled with explosive flammables.

TECHNOLOGY SOLUTION

Purpose for switch is to disconnect electrical power (as close as possible to the batteries) from all energized circuits in case of an emergency. An "Electronically Controlled Switch" must be installed inside the Operators Compartment; Highly Visible and Protected from accidental engagement with two levels of activation. This configuration meets the ADR Technical Specification compliance standards applicable for 48 countries in Europe. The implementation of this standard by OEM parts results in costs of approx. \$ 3,400 vs. \$ 1,400 with OEM compliant parts after a local market survey and involvement of our ADR specialists. All certifying authorities accepted the cost preventing method, while its ADR compliant and OEM conform.

GRAPHIC



WARNING: BATTERIES MUST BE DISCONNECTED IAW TM 9-2320-279-20-1 BEFORE INSTALLATION TASK!

