



FIRETRACE[®]

AUTOMATIC FIRE SUPPRESSION SYSTEMS

**ARMORED CARS AND
BULLETPROOF VEHICLES**

Fire Protection Solutions



THE PROBLEM

An armored car, truck or SUV is the first, best defense against the threat of roadside assault, robbery and kidnapping. While armored vehicles provide high levels of ballistics protection, their engine compartments may be less well protected and can be targeted in an attempt to disable the vehicle. Such an attack can result in an engine fire, in some cases with tragic consequences.

A fire in an engine compartment is a very serious situation. This kind of fire can grow out of control very quickly, resulting in an intensely hot, fast spreading blaze that can flood the interior of the vehicle with dense black smoke and deadly carbon monoxide. It is imperative to exit a burning vehicle immediately to avoid serious injury or death; however, doing so can expose the driver and passengers to extreme danger in a hostile situation.

The automatic detection and suppression of an engine fire allows the driver and passengers to remain safely inside the vehicle and not be forced to exit in a hostile situation. Don't take chances – protect against the threat of engine fires with Firetrace.

THE FIRETRACE SOLUTION

Firetrace offers a unique solution for protecting armored vehicles against engine fires. The “heart” of the Firetrace system is the unique, flexible red fire detection tubing that can be routed in and around the engine compartment. The detection tubing is designed to burst when exposed to the radiant heat of a fire, which automatically triggers the release of an appropriate fire extinguishing agent.

The Firetrace system is immune to the dirt, grease, vibration and temperature extremes in armored vehicle engine compartments. And because the Firetrace detection tubing can be routed throughout the engine compartment – right where fires begin – it can react many times faster than competing fire suppression systems. Every second saved results in less risk to the vehicle's occupants and reduced vehicle damage and downtime.

Remember: fire protection saves lives. A Firetrace automatic fire detection and protection system can reduce or eliminate vehicle damage and downtime. In many cases, the value of the armored vehicle itself justifies Firetrace. In all cases, the safety of the vehicle's occupants makes fire protection a necessity!

Firetrace automatic fire detection and suppression systems are ideal for:

- ✦ Executive Armored Sedans, Trucks and SUVs
- ✦ Armored High End Luxury Limousines
- ✦ Armored Transit Vans
- ✦ Cash-In-Transit Vehicles
- ✦ Special Purpose Military Vehicles
- ✦ Law Enforcement Tactical Armored Vehicles

FIRETRACE ADVANTAGES:

- ✦ Fast, reliable automatic detection and suppression
- ✦ Activates automatically in the event of a fire, no driver assistance needed
- ✦ Can be installed in any armored vehicle quickly and easily
- ✦ Can withstand grease, dirt, shock, vibration and temperature extremes
- ✦ Does not interfere with vehicle operation or maintenance
- ✦ No false activations, reacts only to the radiant heat of a fire
- ✦ Fire extinguishing agents will not harm the vehicle or its occupants
- ✦ Works even when the vehicle is moving
- ✦ Works even if the vehicle is unoccupied or the battery is dead
- ✦ System can be activated via a driver accessible manual release
- ✦ Low pressure switch can activate audible or visual alarm, loudspeaker, etc.
- ✦ Supported by a network of more than 250 distributors worldwide

HOW IT WORKS

Firetrace offers two different automatic fire detection and suppression systems that can be installed on any armored car, van, limousine or SUV with any level of armor protection.



Firetrace Direct System

The Direct System utilizes the detection tubing as both the fire detection device and the fire suppressant delivery system. In the event of a fire, the tubing ruptures, forming a discharge “nozzle”. The agent then releases through the tubing nozzle suppressing the fire quickly and thoroughly – right at the point of inception.

Firetrace Indirect System

The Indirect System utilizes the tubing as detection only. When the tubing ruptures the pressure is released, allowing the valve to operate and deliver the suppressing agent through braided hose or copper or stainless steel tubing to strategically placed nozzles within the protected enclosure.

Firetrace systems are compatible with most commercially available fire suppression agents, including “clean” extinguishing agents such as Dupont™ FM-200® or 3M™ Novec™ 1230 fire protection fluid, as well as CO₂, dry chemical powders, foam, and water.



The Firetrace Detection Tubing is the “heart” of the system



While armored vehicles provide good ballistics protection, their engine compartments may be vulnerable to attack.



The Firetrace system activates automatically even if the vehicle is unoccupied or has a dead battery.

FIRETRACE[®]

AUTOMATIC FIRE SUPPRESSION SYSTEMS

FIRETRACE[®] Armored Car and Bulletproof Vehicle Applications

Firetrace systems are currently in use on more than 5,000 vehicles worldwide. Firetrace has its origins in the late 1980's in the United Kingdom as a special hazard fire suppression system. Through the 1990's applications expanded to include enclosures such as machines, fume hoods, data centers and electrical cabinets as distribution increased in Europe.

In 2001, the worldwide rights to Firetrace were purchased by Firetrace USA, a group of fire suppression industry veterans who saw the value in creating fire suppression systems for "micro-environments". This concept is simply providing supplemental protection that suppresses fire quickly within the protected space before larger room or building systems would activate. As a result of this supplemental protection, fire damage, both direct and collateral, and costs associated with cleanup and downtime are significantly reduced or eliminated. Available in multiple system sizes (ranging from one pound systems to 50 pound systems) and utilizing a variety of fire suppressing agent options, Firetrace is the fire suppressing system of choice for all armored cars, vans, trucks, limousines and SUVs at any level of armor protection.



Firetrace currently has more than 20 international approvals and listings, including: UL, CE, FM, ULC & ISO9001. Approvals and listings vary by system type and agent.