

# STINGER SPIKE SYSTEM

t i r e   d e f l a t i o n   d e v i c e s



**FEDERAL SIGNAL**



# STINGER

According to U.S. Department of Justice statistics, a majority of the largest police and sheriff departments are enacting restrictive pursuit driving policies in order to reduce the injuries and property damage associated with high-speed chases. The STINGER SPIKE SYSTEM® allows law enforcement officers to control those situations by stopping fleeing vehicles effectively, reliably, and safely.

The STINGER system employs high strength, hollow steel spikes that penetrate all types of tires – including self-sealing and run-flats – and deflate them in a regulated manner. This prevents blowouts, slows the perpetrator's vehicle to a safer rate of speed, and allows him to make a controlled stop. And STINGER spikes are effective on all types of vehicles, including cars, trucks, and buses.

## Safe and Easy to Use

The STINGER device is designed for quick, reliable operation. A simple pull on the handle or a toss is all it takes to position the spikes. The single, accordion-action element deploys almost instantly, giving officers time to take cover. Extra-width road coverage and low visibility minimize avoidance by fleeing suspects. And, after spiking, a simple yank on the handle quickly retracts the unit, clearing the road for pursuit vehicles and other traffic.

## Rock and Tilt Mechanism

The STINGER SPIKE SYSTEM uses patented technology to ensure effective tire penetration. A typical chase intervention flattens one to four tires, safely slowing and stopping the vehicle in just minutes.

At the initial contact, the assembly automatically rocks toward the tire, pointing the spikes directly at the tread, allowing the full length of the spike to be used for penetration. And as the spikes pivot into the tire, the safety tip guards are pushed down.

The assembly continues to rotate with the motion of the vehicle, driving the spikes deeply into the tire. The hollow spikes control the tire deflation rate, preventing a blowout and sudden loss of control.

The rolling tire then tilts the spike system in the opposite direction, allowing the spikes to pull completely out of the assembly. With the next rotation they are pushed fully into the tire – leaving no debris on the roadway. A tire typically picks up 4-6 spikes and deflates in 12-20 seconds.







## STINGER Models

All STINGER models incorporate a reusable modular base, with molded sections built of high-strength, resilient synthetic polymer, which stands up to hard use under the harshest conditions. The base is designed to endure numerous pursuits and has withstood impacts in excess of 130mph. If, however, a unit is damaged, the individual sections are easily replaceable. And the connecting hardware is stainless steel for long life. The individual spikes are made of 304-T7 stainless steel for superior strength and effective tire penetration. All STINGER SPIKE SYSTEMS are supplied with replacement spikes, spike safety guards, a spike replacement tool, and a quick-deployment carrying case.

Standard STINGER SPIKE SYSTEMS are available in three different lengths to handle a variety of situations. The 10-foot Metro model is perfect for narrower urban streets and small country roads. The 15.5-foot Trooper model is wide enough for multi-lane roads. And the 25-foot

Defender model covers applications such as interstate highways, airport entry gates, military compounds, and security checkpoints.

The STINGER XL model employs a new longer spike length designed for penetrating thicker tires, to safely and quickly end pursuits involving large trucks, farm equipment, and military-type vehicles. The STINGER XL system extends to 15.5-feet for use on multi-lane roads.



## Reusable to Control Cost

STINGER SPIKE SYSTEMS can be quickly readied for re-use by simply replacing the pulled spikes. Each unit is supplied with replacement spikes, safety guards, and an insertion tool. And when STINGER systems are deployed in the line of duty, Federal Signal provides replacement spikes at no charge – just by calling 1-800-STINGER for a free spike replacement certificate.



## RAT-TRAP II



Reduce your liability by preventing pursuits before they happen. The pocket-sized RAT-TRAP® II tire deflator is perfect for neutralizing a vehicle from being used to flee authorities. Simply open the device and place it under the tire of an unoccupied, stationary vehicle. Any attempt to drive the vehicle will immediately deflate the tire, eliminating the possibility of a high-speed getaway attempt. RAT-TRAP tire deflators are constructed of a high-strength polymer, and the stainless steel spikes can be replaced after the unit is used.

## Training Support



The latest pursuit policies being enacted by law enforcement agencies call for practical, hands-on training in the use of any tire deflation device.

Federal Signal has led the industry in providing such comprehensive training with its STINGER SPIKE SYSTEMS. In addition to its North American network of certified dealer/instructors, the company supplies classroom materials, training videos, and un-spiked models for training and practice in the proper deployment and retraction of the system. And the reusability of the spiked system helps to control training costs.

## Federal Signal

Federal Signal Corporation (NYSE: FSS), founded in 1901, is a manufacturer and worldwide supplier of safety, signaling and communications equipment, fire rescue products, street sweeping and vacuum loader vehicles, refuse truck bodies, high-performance water blasting equipment, parking control equipment, carbide and super-hard tipped cutting tools, precision metal stamping punches, and components for plastic injection molds.

The Emergency Products Division is the leading supplier of audible and visual warning devices for vehicles. It serves the police, fire, ambulance, tow and work vehicle markets with strobe, halogen, and LED lightbars, flashers, switch controls, and high visibility beacons, as well as audible warning devices such as sirens, speakers, and back-up alarms. Check out all of the police market products at [www.fedsig.com/police](http://www.fedsig.com/police).



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