

## **Best Practice: Anti-Vehicle Measures (Caltrops & Spike-Strips)**



<b>Category:</b>	Access Control
<b>Location:</b>	Republic of Korea, Multiple facilities.
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<b>POC:</b>	Ministry of Maritime Affairs and Fisheries.
<b>WWW:</b>	<a href="http://momaf.go.kr/eng">momaf.go.kr/eng</a>

**Description:** Portable, low cost, anti-vehicle barrier devices.

**Discussion:** These low cost vehicle barrier devices (sometimes called “caltrops” and “spike strips”) can be constructed from scrap steel. Small caltrops and spike strips work by causing tire blow-outs of vehicles that try to drive over them. Large caltrops roll under a vehicle driving over them, raising the front wheels off the ground, causing the driver to lose control. These vehicle barriers can be used to enhance security at any access point where vehicles or motorcycles can gain access to a facility. The devices can be easily positioned in front or behind of existing gates or fence lines. The devices can be produced in large numbers and placed on exterior roads or parking lots to expand the perimeter of any port facility during heightened security levels. The device can be used at any facility and require minimum training to properly use. Painting the devices a bright color makes them more visible and can prevent accidents.

**Potential Down-side:** Proper design and construction of the barriers, and the placement of devices is critical to their effectiveness at stopping vehicles. Vehicle barricades that are not affixed to the ground or of sufficient weight can easily be moved out of position. Poorly designed or built barriers may be ineffective at stopping various types of vehicles (motorcycles, heavy trucks, etc).

**Conclusion:** These devices can be easily mass-produced by any welding facility with access to steel stock or scrap metal. The anti-vehicle devices can be easily deployed by security personnel with minimal training.

**Cost:** Cost of scrap steel, welding and painting. No continued operational costs.