



OLR RESEARCH REPORT

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“ONE KEY FITS ALL” IGNITION KEYS FOR CONSTRUCTION EQUIPMENT

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You asked us to verify that heavy equipment manufacturers rely on a “one [ignition] key fits all” system to start their equipment, and whether any states require manufacturers to produce a greater variety of heavy equipment ignition keys.

SUMMARY

An expert on heavy equipment theft says construction equipment manufacturers do rely on a “one key fits all” system for their vehicles, and that he is unaware of any state that regulates production of heavy equipment ignition keys.

George Kleinsteiber, who teaches law enforcement officials in the U.S., Canada, and elsewhere how to identify and investigate stolen heavy equipment, says he encourages heavy equipment owners to install some type of after-market device to lock, track, or immobilize their vehicles to prevent their theft. He said insurance companies often require proof of these devices before insuring the vehicles and lending institutions often require similar proof before loaning construction companies money to buy or lease them.

THEFT PREVENTION OF HEAVY CONSTRUCTION EQUIPMENT

This report is based on information provided by Kleinsteiber, a retired detective constable with the Ontario Provincial Police and past president of the North East Chapter of the International Association of Auto Theft Investigators. Kleinsteiber teaches law enforcement officials in the U.S., Canada, and elsewhere how to identify and investigate stolen heavy equipment, and is familiar with legislation dealing with heavy equipment theft. Kleinsteiber wrote "[Combatting Heavy Equipment Theft: An Officers' Guide to the Proper Identification of Construction Equipment.](#)"

According to Kleinsteiber, almost all heavy equipment manufacturers "have for over 50 years relied on 'one key fits all' type of ignition systems...The manufacturers do this for the ease of potential buyers who want to have one key that will fit every piece of equipment made by the same manufacturer."

The "one key fits all" system makes it relatively simple for heavy equipment operators at construction sites to operate any one of a number of similar vehicles without carrying dozens of unique keys. It similarly simplifies operations for construction equipment rental companies, which may have hundreds of pieces of heavy equipment.

Kleinsteiber said manufacturers often incorporate a secondary security system into newly-built machines or encourage equipment owners buying a new machine "to employ some type of anti-theft system on it before putting it out to work." In addition, he says, "many insurance companies...demand that purchasers install some type of anti-theft system on their equipment [and] refuse to insure it until they see proof of [such a device] being installed." Lending institutions that finance the purchase or lease of heavy equipment will often not provide a loan unless they see similar proof.

Kleinsteiber said he encourages heavy equipment owners to "place some type of after- market locking, tracking, or immobilizing system on every piece of equipment they own...If they are buying new equipment from the manufacturer, most of them now incorporate a secondary security system right into the electrical system when the machine is built. These systems can be GPS tracking, immobilizing, or [an] electrical cutoff programmed right into the machine computer, which will not allow power to reach the electrical system on the machine."

For example, he says, a GPS system can be created that places a virtual fence around a work site. The equipment owner can detect whether someone tries to steal the vehicle on his cell phone or pager, and shut down power to the vehicle. An immobilizing system uses the machine's hydraulic fluid system to effectively shut down the machine when it is not being used. Kleinsteiber said the least expensive option is installing a hidden cut-off switch that shuts down the vehicle's electrical system at the end of a workday.

Kleinsteiber said he "cannot think of anywhere in either Canada or the United States, or in fact anywhere else in the world where any government agency has tried to enact any sort of law regulating ignition keys on heavy equipment."

ADDITIONAL INFORMATION

We also are attaching for your information the "[2010 Equipment Theft Report](#)," prepared by the National Equipment Register and the National Insurance Crime Bureau (NICB). The report is based on data the NICB drew from the National Crime Information Center's database of more than 13,000 construction and farm equipment thefts in 2010.

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