



**LOSS PREVENTION
AND
SECURITY TECHNIQUES
FOR EQUIPMENT OWNERS**





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A. MANAGEMENT CONSIDERATIONS

Risk management is sometimes considered to be an extra cost that, if avoided, will increase profitability. Not investing time or money in risk management programs may save a few dollars in the short term, but in doing so you increase the risk of major financial loss and/or increased insurance costs in the long term. The steps outlined below, many of which are cost-free, are the type of things that a company with a well-managed safety policy, good management and a motivated workforce will already be doing. Not all equipment owners will be able to implement all suggestions – some will be relevant to your operation and some will not.

1. GENERAL

- Make your theft prevention policy part of your business plan and link it to incentives for employees.
- Allow time in your employees' day to adhere to any responsibilities that are outlined in the theft prevention policy
- Consider joining your local contractor's theft prevention organization in order to exchange ideas and information about theft prevention and the pooling of resources. If there is no such organization, suggest the formation of such an organization to your local construction/farmers association.
- Conduct unannounced and random worksite visits to ensure nothing unusual is occurring while work is not in progress.
- Invite and be open to suggestions from field employees about security and theft issues; they are on the site and know what potential problems exist.

2. SECURITY POLICIES

- Create a written worksite "Security Plan" outlining the procedures your company will follow. Create a check-list for your initial security audit.
- Consider hiring a guard service to monitor your worksite and/or installing video surveillance systems. If you cannot afford this, ask other local businesses about sharing resources.
- Maintain a list of employees authorized to enter/leave your worksite and which people may use specified pieces of equipment. Ensure that site management and security personnel have easy access to this list.
- Consider issuing Identification Cards to employees assigned to your worksite; assign "Visitor" passes to subcontractors or anyone else coming to your site for a short time.
- Log all visitors in and out of the site.



- Work with local law enforcement before a theft occurs. This will allow officers to patrol more effectively as they will be aware of expected activity at your worksite in off-hours and have an awareness of any projects considered to be high risk. Request that police make drive-by checks of your site after-hours/ weekends.
- Consider keeping disposable cameras readily available at the worksite for employees to photograph suspicious people possibly evaluating the site for theft.

3. INVENTORY MANAGEMENT

Keeping detailed records of your equipment, which can be made part of your fleet management or accounting functions, dramatically increases the chance that a stolen unit may get recovered. If you make it known that these records can be made readily available to law enforcement, this may also deter theft.

- Keep a detailed and accurate inventory of all equipment on a given worksite including a record of equipment location assignments, the dates of delivery and anticipated return.
- Record year, manufacturer, model number and PIN or serial number from actual plates/decals. When describing a unit, use actual manufacturer model names; avoid using generic terms such as “tractor” or “dozer”.
- Register your equipment on a national database that works with law enforcement, such as the National Equipment Register (NER). Ask for theft deterring decals to show thieves that this has been done.
- Use etching tools, die stamping or a steel punch to duplicate a unit’s Product Identification Number (PIN) or other serial numbers in at least two places on the equipment, one obvious, one hidden; record the location of these numbers. This will help in the identification of your equipment and proof of ownership. Adding another number unique to you (Owner Applied Number – OAN) will also help in proving ownership.
- Take photos of all units from all four sides. Update photos as needed (when attachments are added or removed). Photograph units on their transport trailers as well.
- Customize the unit with unique paint colors, such as painting the roof a distinctive color or painting the unit number in large characters. Note such modifications as well as any decals, damage, company / owner applied numbers, etc... that are unique to the unit when you record equipment details to aid identification and proof of ownership.
- To aide in the identification of a unit in the even it is recovered after a theft, record any and all numbers on the unit along with that number’s location. Be sure to include engine numbers.
- Indicate in your records if the unit has wheels or tracks



4. PERSONNEL

Your workforce can be either a risk or a potential ally in combating equipment theft. Clear management procedures combined with employee incentives will make the difference between the two.

- Prior to hiring, simple and cost effective identification verification and background checks should be performed. Previous employers should be contacted for references, but not relied upon as the sole source of verification.
- Make it clear to employees that theft impacts the bottom line and will therefore have an effect on employee compensation. Consider an annual incentive plan that is linked to levels of, or reductions in, costs associated with theft and safety risks.
- Clearly explain this policy in writing and discuss loss prevention programs and policies at regular safety meetings.
- Establish a confidential reward system for information leading to recovery of equipment and / or a subsequent arrest. Those working on site are the most likely to have information of this nature. Seek advice from law enforcement or legal sources on the guidelines associated with paying rewards. Alternatively become a member of a local or national 'hotline' reward program which can provide funding for the rewards and posters to inform employees. Even if employees do not call in, the warning signs will deter 'insider' thieves.



B. SITE SECURITY

Site security is vital for protecting not only equipment but other valuable assets – even intellectual property. Some physical site security measures are difficult to implement on mobile worksites (road construction) or large premises (farms). Advice is given elsewhere for measures that can be implemented in these cases.

1. WARNING SIGNS

- Post “Warning; No Trespassing” signs around the perimeter of your worksite. Consider warning signs that indicate what laws will be broken and the penalty imposed if disregarded.
- Post warning signs indicating that equipment on your site all have their Product Identification Numbers (PINs) recorded in a central location within your company and possibly on a national database such as NER.

2. FENCING

Fencing is your first, and in many ways best, line of protection. Its effectiveness depends on the design and quality of the installation, but other factors should be considered when installing, replacing or repairing perimeter fencing.

- Use see-through material such as chain link. This allows thieves to be visible from the outside in the event they get past the fence, increasing the chances of unusual activity being noticed, and therefore deters thieves.
- Keep fenced areas free of debris that may blow to, and get stuck in, the fence and inhibit visibility. Keep bushes and weeds trimmed back from the fence to aid visibility.
- If possible, fences should be at least eight feet in height (if codes allow), with posts spaced at a distance no greater than the width of the narrowest unit in the fleet, and set in concrete.
- Consider using barbed wire or razor wire at the top of fences for added security.
- Conduct routine fence inspections and promptly repair any openings.
- Do not allow random items to be piled up on either side of a fence as it may create a “climbable” condition and compromise security.



3. OTHER WORKSITE BARRIERS

- Barriers should be used when fences are not feasible or in addition to fencing to enhance security.
- Barriers can include low walls, posts, dirt berms or ditches that prevent a unit from being driven or towed off the worksite.
- Walls and berms should be no higher than three feet as that is the maximum height a police officer can see over when seated in a patrol car.
- If possible, posts should protrude two to four feet from the ground, be no more than two feet apart, and should be sunk four to six feet underground in concrete.
- Trenches or ditches should be three to four-feet deep and sloped so that most vehicles cannot be driven across.
- Consider a low fence of heavy steel pipe, two to three-feet high, anchored by posts on eight-foot centers.
- Regardless of which barrier method is chosen, all worksite entrances should have a well-secured gate.

4. GATES

- Gates should be of heavy construction, with hinge pins spot-welded to prevent easy removal.
- Construct gates so that the longest vehicle you use can be safely pulled onto the site without extending out onto a road or highway.
- Locking hardware should consist of a case-hardened chain and a high-security padlock permanently attached to the fence, or shielded or blind locking devices should be used.
- If possible, have only one entrance/exit at the site.
- Limit access to keys for all fenced areas.



5. LIGHTING

Lighting is one of the most valuable deterrents as most thefts occur at night.

- In order to avoid a distracting glare for patrolling officers or casual observers, lights should be placed near the perimeter of the property (but far enough from the perimeter to prevent a thief from disabling the lighting) and directed toward the worksite.
- Lights should be well maintained with the changing of bulbs as needed a priority.
- In small compounds, low-cost motion sensors can be linked to lighting, but should cover the entire compound and all approaches. This may also be valuable in specific areas of a larger worksite.

6. TRAILER / OFFICE

- Keep a master record of the serial numbers on all tools, equipment, computers, fax machines, desk and cell phones, and two-way radios.
- Computers should be secured to the side of a desk or the floor using strips of metal, bolts or screws or by using newer locking devices created just for this purpose.
- Contractors should back up their computer data weekly; any back up disks or CD's should be stored off-site in a secure location.
- Use 'point of entry' or motion sensor alarms to provide added security for your trailer.
- As a deterrent, post a notice on the door or outside wall to alert thieves that some or all of the above measures have been implemented.

7. KEYS

As keys are often left in vehicles, access to keys is often unregulated, and manufacturer's keys may work on more than one unit, thieves are often able to simply drive equipment off a worksite.

- Make it a written company policy that all keys be removed from equipment when not in use or in storage.
- Make a note of who has access to, or is assigned, keys to equipment or the locks at your worksite.
- Consider a "Key Sign-Out Log" to record the whereabouts and possession of all keys.
- Keep all keys secured in a safe or lockable area after-hours or when not being used.



8. LOCKS

Perimeter fencing and other security devices will only be as good as the 'weakest link;' often the lock itself.

- If padlocks are used, they should be "high security," i.e. case-hardened or laminated steel, and preferably with tamper proof guards.
- Combination locks are a poor idea due to the potential of the combinations being shared with outsiders.
- When possible, ensure that key-in cylinder locks are protected by a guard to prevent removal.
- Case-hardened chains used with padlocks should be thick enough to resist torching, saws or bolt cutters.
- Consider cable or wire rope instead of chain as it is harder to cut and requires special tools.
- Consider "blind" or enclosed locking devices on equipment doors and perimeter gates.
- Consider using gauge protectors and panel locks on your equipment.



C. VEHICLE SECURITY

It may be expensive or impossible to ensure good perimeter security at a worksite, such as road construction or larger premises. In this case the last line of defense is vehicle security. Even where good perimeter security is in place, it must be combined with good vehicle security to deter determined thieves.

1. EQUIPMENT MARKING

Inventory management techniques, such as having each of your units registered on a national database used by law enforcement and bearing a decal which warns thieves that this is the case, may make it less likely for your equipment to be stolen. (See para A.3. for more details.)

2. ANCHORING & IMMOBILIZING

Given that a key may start more than one piece of equipment and some equipment can easily be 'hotwired,' consider using anchoring and immobilizing techniques to further safeguard your equipment.

- Equipment that must be left on site should be anchored with either chain or cable, which can be brightly painted as a deterrent.
- Large equipment can be immobilized by removing wires or battery and lowering all blades or buckets.
- Consider installing theft prevention devices on higher risk or higher value equipment to disable fuel, hydraulic, and/or electrical systems.
- Portable equipment can be immobilized by removing tires if not being used regularly. This has the added advantage of protecting the tires.
- Consider hitch protection on towed equipment or trailers, such as disabling or removing the hitch.

3. EQUIPMENT IN TRANSIT

- Trailers and towable equipment should use quality trailer hitch or king pin locks.
- Maintain minimum fuel levels on equipment being transported. This has both security and safety advantages.
- Secure and lock equipment to the transport platform.



- Neutralize the operating controls and lock the ignition of the equipment being transported; make sure the keys for the unit being transported are not in the unit's ignition.
- If possible, remove the tongue off of the trailer.
- Plan transportation routes and schedules to avoid overnight stops wherever possible. If an overnight stop is unavoidable, try to find temporary storage facility that is secure.

4. EQUIPMENT NOT IN USE

- Ensure that all equipment is returned to its proper place, or an otherwise secure area, upon completion of a task or at the end of the day. Avoid leaving equipment on the side of roads or in public places overnight or particularly on weekends, if possible.
- Discourage subcontractors from leaving or storing unused equipment on your site.
- Arrange/store equipment not in use in such a manner that a missing unit would be obvious, such as a single file row.
- Position larger pieces of equipment in a circular, wagon-train pattern, with generators, compressors and other small items inside the ring. Consider using lifting devices to secure smaller, more easily portable, items.
- Assign a supervisor or manager to regularly check up on equipment that must be left at a work site for an extended period. If a theft occurs, the sooner it is reported, the better the chances of recovery.
- Avoid leaving equipment on a trailer unattended. If this is unavoidable, consider unloading the unit and securing it to the trailer's hitch.



D. ACTION TO TAKE IN THE EVENT OF A THEFT

1. WHEN?

- Thefts should be reported to authorities as soon as possible to increase the chances of recovery. Your equipment may already be on its way to another state when you discover the loss.
- Do not give up hope. Not all stolen equipment crosses state lines or is exported. Even if the loss occurred years ago it may still be recovered if you report the loss to law enforcement and NER.

2. WHO?

- The reporting person should be familiar with the equipment.
- Report your loss to law enforcement. Without this report number you will find it difficult or impossible to make a claim with your insurer or recover the equipment if it is subsequently located.
- Report your loss to your insurer and a specialist service such as NER to increase the chances of recovery.

3. WHAT?

- Report complete details, including: year, manufacturer, model, Product Identification Number (PIN) or serial number, attachment serial numbers, color, size, and unique markings. Provide photos if available and explain the circumstances of the theft.
- It is important that you provide the complete PIN with pre if applicable – e.g. JJG123456 not 123456 as the combination of numbers alone may have been used for another product line.
- The correct model number is important as this is the best way of verifying that a correct PIN has been provided.

What else?

- Consider offering a reward. This can be funded and coordinated through a national hotline.
- Use sources such as associations, national e-mail alert systems and trade journals to alert local equipment owners and law enforcement about the theft. Stolen equipment is most often recovered within 65 miles of the theft location.