COMBINED INDUSTRIES

THEFT SOLUTIONS

Code Of Practice

Combined Industries Theft Solutions
Code of Practice

The construction industry suffers annual theft losses in excess of £650 million. Items of plant and equipment in daily use on sites are becoming increasingly more valuable and complex. Although the primary target of thieves is often plant, it is not uncommon for other materials to be stolen.

The potential for loss due to intruders or malicious persons will vary from location to location or type of development. Remote locations, poor perimeter security, presence of high value plant and equipment in the open all increase the probability of loss.

A risk assessment should be made of the location in terms of the ease of access to the plant/equipment. In most instances it will be a sensible and reasonable action to ensure that access to a site of operation is restricted and plant and equipment is equipped with appropriate measures to deter and prevent theft.

This Code of Practice has been developed to assist industry in undertaking a theft risk assessment, where words appear in brackets further information is available within this document and a suggested Methodology and Worked example have also been provided.

The physical location of the plant and equipment is of primary importance. To this end CITS have identified the following four **Areas** where plant and equipment may be located:

- Depot, In Transit, Controlled Construction Sites and Open/Exposed Sites and provided a framework to allow consideration of the:
- Physical Electronic and Human measures that can be deployed to deter and prevent theft.

Regardless of the outcome of any risk assessment process CITS strongly recommend that:

1. all driven [Category A and B] plant is either:
   a. purchased new with a minimum 3 Star Thatcham Security Rating, or
   b. retro-fitted with Thatcham approved vehicle identification registration, numbering and covert marking system* and Category P2/P3 Thatcham approved Immobilisers
2. all other items of non-driven Category C to F plant and equipment are where feasible protected by the measures detailed in 1b above or other suitable and sensible devices/measures which meet the most appropriate industry standards (e.g. those created by the British Standards Institute, The National Security Inspectorate and other recognised and trusted organizations in confirmation of their quality and integrity
3. where plant is to be hired out, sensible and practical hiring procedures for authentication of customers are in force and audited at regular intervals in accordance with specific guidance provided by and available from The Construction Plant-hire Association.

"Should you not be able to comply with the above recommendation CITS would suggest that you contact your plant insurer to ensure that any security device or measure you have or intend to install is satisfactory to them"?

**CESAR Plant Registration Scheme*

The following **Definitions** of the Four Areas where Plant and Equipment may be located

AREA 1 - DEPOT

Definition
A place where plant and equipment is securely stored when not in use or on hire.

AREA 2 - IN TRANSIT

Definition
A period of transportation between depots, controlled construction site or open/exposed sites.

AREA 3 - CONTROLLED CONSTRUCTION SITE

Definition
An area in which construction operations are taking place with

- Secured perimeter
- Active access control
- Secured outside of normal working hours.

AREA 4 - OPEN/EXPOSED/SITE

Definition
Where plant and equipment is present in an unrestricted area open to the public, e.g.

- Road side utilities
- Rail side
- Road side construction and maintenance sites

Assessing the Risk

Methodology to help assess the current risk protections for your plant and equipment

LOCATION	RESPONSE		
	Physical	Electronic	Human
Depot			
Transit			
Controlled Site			
Open Site			

WORKED EXAMPLE

A small builder with own plant storage yard which is left unattended at night who owns two mobile diggers and occasionally hires plant in.

LOCATION	RESPONSE			
		Physical	Electronic	Human
Depot Transit Controlled Site Open Site	CESAR Scheme Registration and Thatcham approved immobilisation for all driven Category A and B items	2.3m high perimeter fence – palisade or welded mesh. Single or double leaf gates of steel construction, anti lift hinges & fitted closed shackle security padlock used out of working hours.	NSI standard alarm with yard perimeter detection or monitored CCTV for yard.	Lock up routine. Site visits out of hours. Alarm monitoring. Response to alarm activation.
		Chains, padlocks 'Protective' parking. Secure overnight parking area.	Telemetric tracking system 'Geo-fence' system	Ensure plant is attended whenever possible. Plant not left at dubious unoccupied sites. Key security/Removal
		2.3m high perimeter fence – hoarding, palisade or welded mesh. Single or double leaf gates of steel construction, anti lift hinges & fitted closed shackle security padlock out of working hours. Steel security containers for smaller items & attachments. Plant parked in secure area. Protective parking.	NSI standard alarm with perimeter detection or monitored CCTV for site. Access control for pedestrians & deliveries	Lock up routine. Security guards or mobile patrols. Site visits out of hours. Alarm monitoring. Response to alarm activation.
		As close as possible to Controlled Site	Monitored alarm with perimeter detection or monitored CCTV for site	As close as possible to Controlled Site depending on size of open site

Standards Recommended for consideration as Control Measures

DEPOTS

Access to the Depot should be controlled and the level and resistance of those controls will vary according to the level of risk associated with the area that the Depot is located in, the value of the assets kept there and the nature of those assets in terms of their relative portability. A combination of the following, Theft Prevention Measures should be considered:

- **Physical Theft Prevention Measures**
- **Electronic Theft Prevention Measures**
- **Human Theft Prevention Measures**

PHYSICAL

SITE

- Locks BS standard (padlocks to be security grade heavy duty closed shackle etc)
- Padlocking bolts
- Fencing (preferably palisade at least 2.3m high)
- Razor wire
- Gating to the same height as the walls
- Grills
- Walls (at least 2.3m height)
- Chains (heavy duty)
- Bollards
- Containers
- Depot buildings
- Anti ram raid measures (including concrete blocks, high kerbs etc)
- Anti climb measurers

ITEM

- Key security
- Chain/padlock small plant items together (or to a secure structure)
- Fit cab screens to plant
- Plant and machinery painted in corporate colours

ELECTRONIC

SITE

- NSI/SSAIB Accredited alarms (to grade 3 standard)
- Remotely monitored CCTV (BS8418)
- Movement detectors linked to floodlighting
- Access control

ITEM

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard

HUMAN

- Protective positioning / parking measures
- Security Guards (NSI / Insurance Company approved)
- Supervision
- Inspection and audit responsibilities
- Event response

IN TRANSIT

When plant & machinery is moved, there may be times when it is necessary to leave the property unattended and clearly this may create an opportunity for local thieves to take advantage of a transporter who is unfamiliar with the area and its risks. It is therefore important to consider the following Theft Prevention Measures to minimise this risk:

- **Physical Theft Prevention Measures**
- **Electronic Theft Prevention Measures**
- **Human Theft Prevention Measures**

PHYSICAL

SITE

- Pre-plan secure parking areas for any stop-over's on route
- Ensure security of the destination during any protracted delivery period

ITEM

- Mechanical immobilisers
- Locks
- Chains
- Batteries & Fuses removed
- Blocking high value items with low value ones
- Cab screens
- Chain and padlock small items together

ELECTRONIC

SITE

- *See "Depot" for assessing appropriate electronic measures associated with secure parking or secure destinations*

ITEM

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard
- Attack alarms with central station monitoring
- Thatcham Category P5 alarm telemetric tracking system

HUMAN

- Monitoring and supervision
- Bona fide Haulier
- Event response
- Effective route plan

CONSTRUCTION SITES

Use of plant and machinery on Construction Sites may propose an enhanced theft risk, especially where the owner of the property is not in direct control of access to the site. The risk of theft should be properly assessed relative to the controls in place and if required additional Theft Prevention Measures applied:

- **Physical Theft Prevention Measures**
- **Electronic Theft Prevention Measures**
- **Human Theft Prevention Measures**

PHYSICAL

SITE

- *As well as the measures suggested for "Depots" the following should be considered:*
- Inner compounds / zones should be established for parking up or storage when plant and machinery is not in use
- Temporary barriers (e.g. block material)
- Natural barriers offered by the sites position (e.g. rivers, canals and other land features)

ITEM

- The level of protective measures that are sensible will vary dependent on how secure and robust the site security and control procedures are – please see "Depot" and "Open / Exposed Sites" for consideration of further measures

ELECTRONIC

SITE

- On site monitored CCTV systems linked to appropriate flood lighting
- Remotely monitored CCTV systems to BS8418 standard
- Portable detector / intruder alarm systems (with on site or central station monitoring)

ITEM

- CESAR Registration of all driven plant and machinery
- immobiliser to Thatcham Category P2 / P3 standard
- Thatcham Category P5 telemetric tracking system

HUMAN

- The level of protective measures that are sensible will vary dependent on how secure and robust the site security and control procedures are – please see "Open / Exposed Sites" and Depot for consideration of further measures

OPEN/EXPOSED SITES

Where there is a risk that the plant or machinery will be left unattended on a site with no formalised access controls (i.e. open to the public), item based protections are critical. Even where a compound can be established with perimeter protection item based Theft Prevention Measures are considered critical to minimising the potential for theft:

- **Physical Theft Prevention Measures**
- **Electronic Theft Prevention Measures**
- **Human Theft Prevention Measures**

PHYSICAL

SITE

- *Where possible the measures suggested for "Construction Sites" should be considered. If this is not feasible the following are sensible measures*
- Consider short term rental of a nearby secure premises
- Maximise temporary perimeter arrangements
- Install temporary compounds or barriers to restrict easy access to plant and machinery

ITEM

- Plant and machinery painted in corporate colours
- Locate plant within view of guards or CCTV system
- Key security locked safe / metal key cabinet or taken off site
- Secure small and portable items overnight in a locked container or remove from site to secure location
- Chain/padlock small plant items together (or to a secure structure)
- Fit cab screens to plant
- Block high value items in with smaller items
- CESAR Registration of all plant and machinery

ELECTRONIC

SITE

- Portable or fixed CCTV / alarm system monitored offsite and linked to appropriate flood lighting

ITEM

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard
- Thatcham Category P5 telemetric tracking system

HUMAN

- Event response
- Regular reviews and changes to the security arrangements as site circumstances change
- Protective parking
- Staff incentives and penalties for good security practices on site
- Security focus in site management

What is the CESAR Scheme?

The Scheme provides a covert and overt identification and registration system for plant and machinery and includes the following features

- A registration service – construction plant and equipment will be registered on a central database with a secure 24/7 call centre administered by solution providers Datatag
- Registration documentation – issuing registration certificates which record equipment details, including change of keeper forms for subsequent owners.
- Registration will include automatic inclusion onto the DVLA off road register (ORR) for appropriate plant
- Plant Identification – a system of tamperproof triangular identification plates, together with embedded, state of the art chips and tags will enable instant verification of plant details and ownership
- Security Marking – advanced Datadots® and a forensic DNA solution applied to equipment enables identification of machine details and the authorised owner.

Full details of the Scheme are available on CESAR's website (www.cesarscheme.org)

Who are Thatcham and What do they do?

The Motor Insurance Repair Research Centre or Thatcham as they are widely known was established in 1969 by British Insurers. The Centre is independently operated with a Board of Directors drawn from amongst the 31 insurer members who fund their work.

Thatcham is a not-for-profit organisation. Their main aim is to carry out research targeted at containing or reducing the cost of motor insurance claims, whilst maintaining safety and quality standards. Collaboration with vehicle and security equipment manufacturers has brought about a major reduction in UK vehicle (mainly car) crime. The Thatcham security testing regime is considered to be one of the most rigorous in the world and acts as a model for crime prevention efforts internationally.

At the request of PANIU and in conjunction with CITS members and the main UK insurers of plant and agricultural equipment, Thatcham, under the adopted title of "The Vehicle Security Steering Group-Plant (VSSG- P) have developed a 5 star security assessment and rating system for security devices/systems which can be fitted to plant at the time of manufacture or aftermarket retro-fitted thereafter and which are fully tested and proven to resist theft of construction and agricultural plant.

***5 STAR RATING**	1st	Vehicle identification & registration (CESAR Scheme)	***[3 STAR RATING]**
	2nd	Unique Key	
	3rd	Category P2 / P3 Immobilisation device	
	4th	Peripheral security (cab / window locks)	
	5th	Category P5 After-theft tracking systems	

IMPORTANT NOTE
At the time of producing this information the maximum award made to a manufacturer is 3 Stars.

With many machinery manufacturers now meeting, the minimum 3* standard, at point of production, Thatcham continue to engage with machinery manufacturers, Insurers, Security product providers & the police to ensure that their security rating is as up to date as possible.

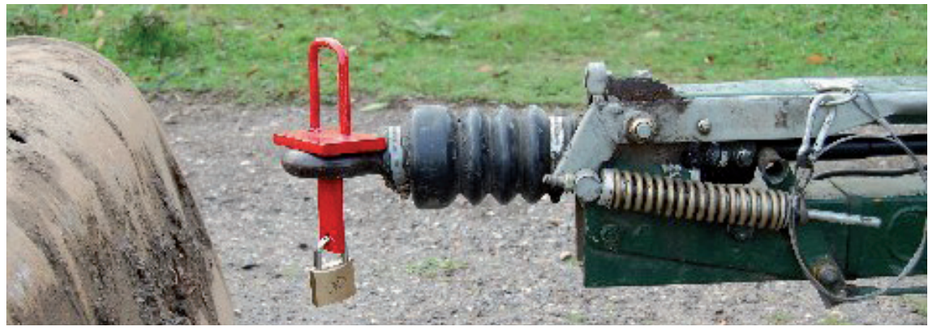
Full details of the Thatcham VSSG-P initiative are available on their website: www.thatcham.org

What are the Plant Categories for?

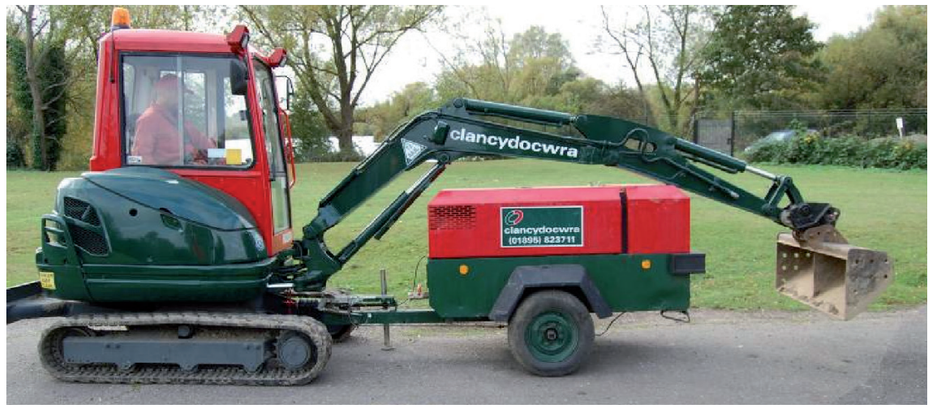
The following chart has been extracted from the Home Office Construction & Agricultural and Plant Security Guidance Document 50/07. The Categories are used by Thatcham and plant Insurers to classify and develop security and underwriting initiatives suitable to the unique features of each group.

Category	Description
A	Driven Equipment comprising Large Tracked and Wheeled Machines greater than 3 tonnes
B	Driven Equipment comprising Compact and Smaller Driven Equipment less than 3 tonnes
C	Non-Driven Equipment and Towed Plant with Axle
D	Non Driven Mobile/Portable Attachments and Equipment
E	Power Tools
F	Non-Powered items

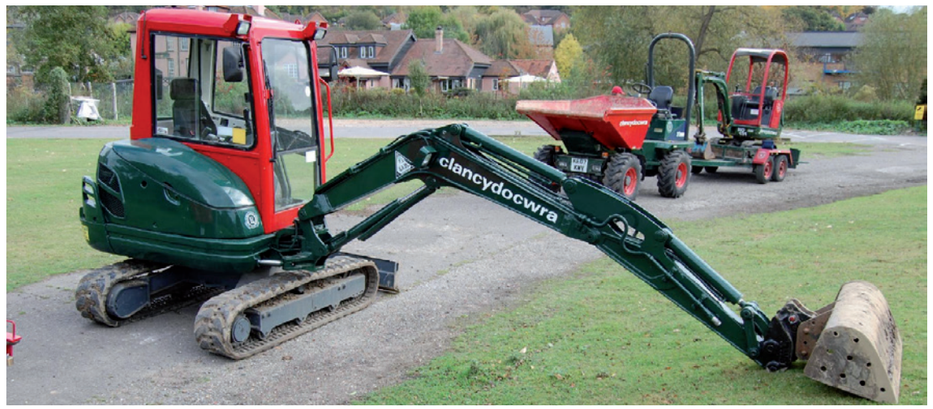
Examples of best practice in securing equipment



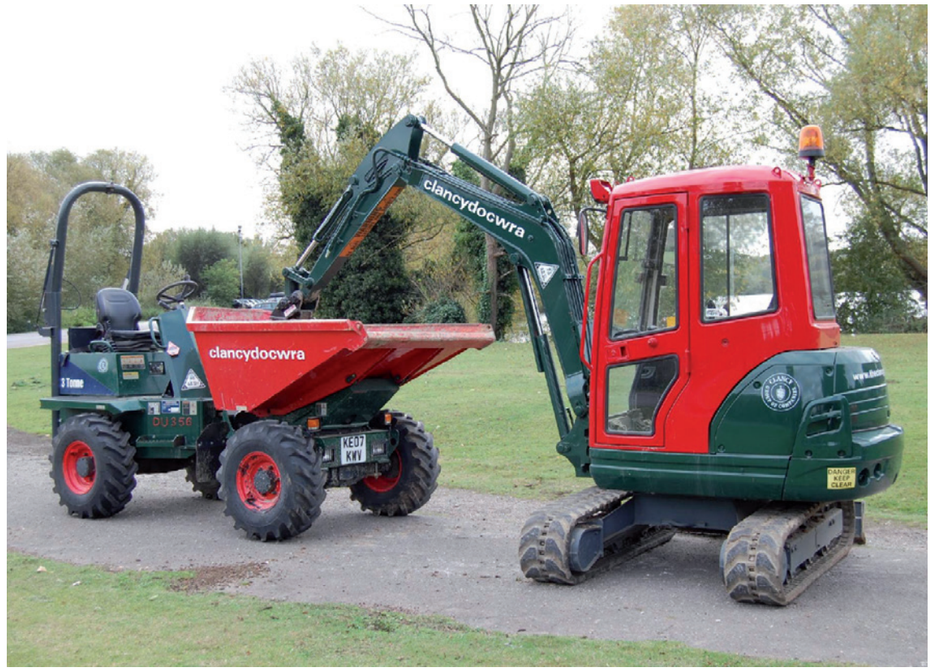
Trailer locks and tow hitch locks preventing removal.



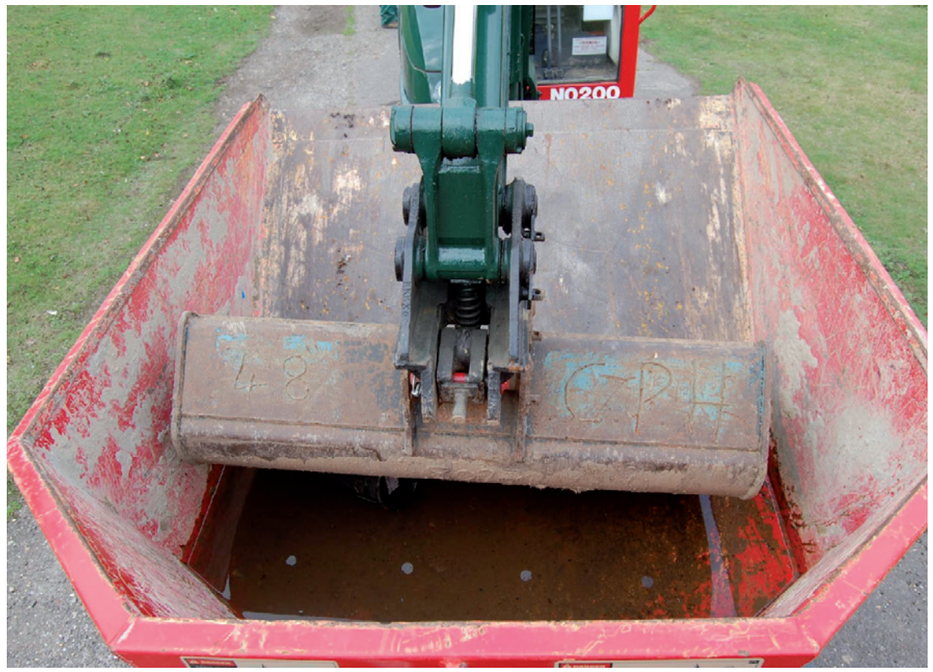
When leaving equipment overnight on sites secure compressors under boom arms of mini excavators then use immobilisers or hydraulic locks to prevent removal.



If leaving mini excavators remove from trailer, slew cab and extend boom arms. Use immobilisers and/or hydraulic locks. This makes the machine impossible to remove or lift away. Note the use of CESAR registration and corporate livery. Criminals dislike stealing this type of equipment due to expense of repainting equipment.

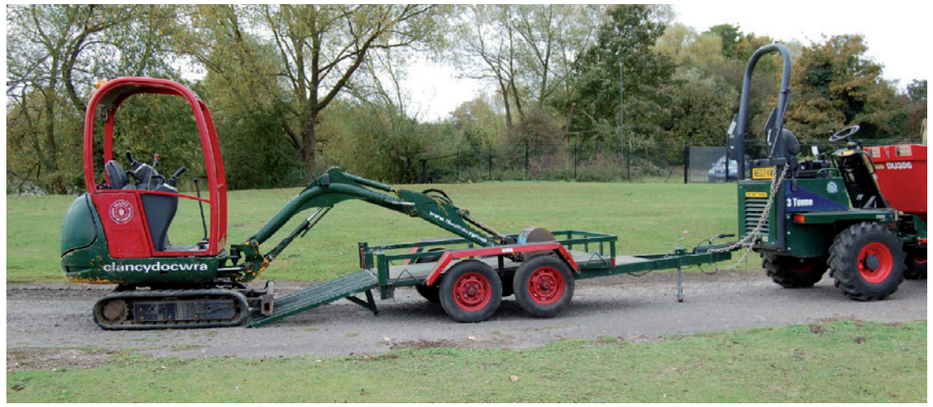


Secure equipment together preventing either being lifted or dragged away. Use immobilisers and/or hydraulic locks with chain and padlocks.

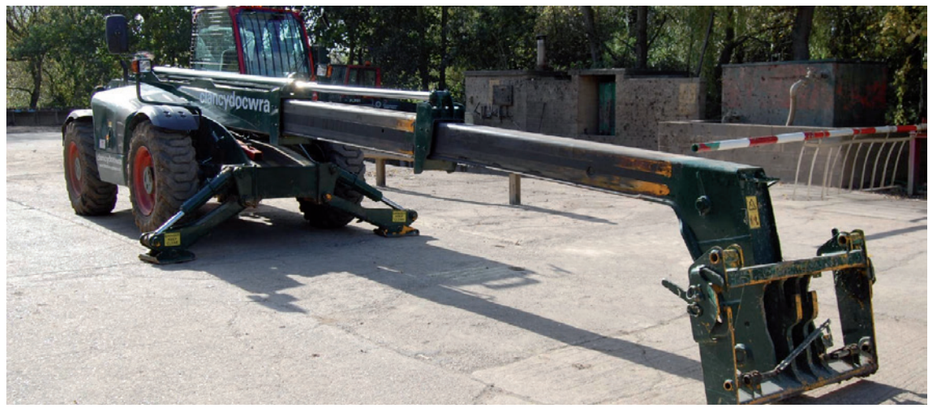


For attachments and buckets weld plant numbers and company logos/details to aid identification.

Secure trailers and equipment to each other or to road furniture. Lift all chains from ground to prevent easy attacks and purchase for cutters/bolt croppers. Invest in good quality approved chains and padlocks.

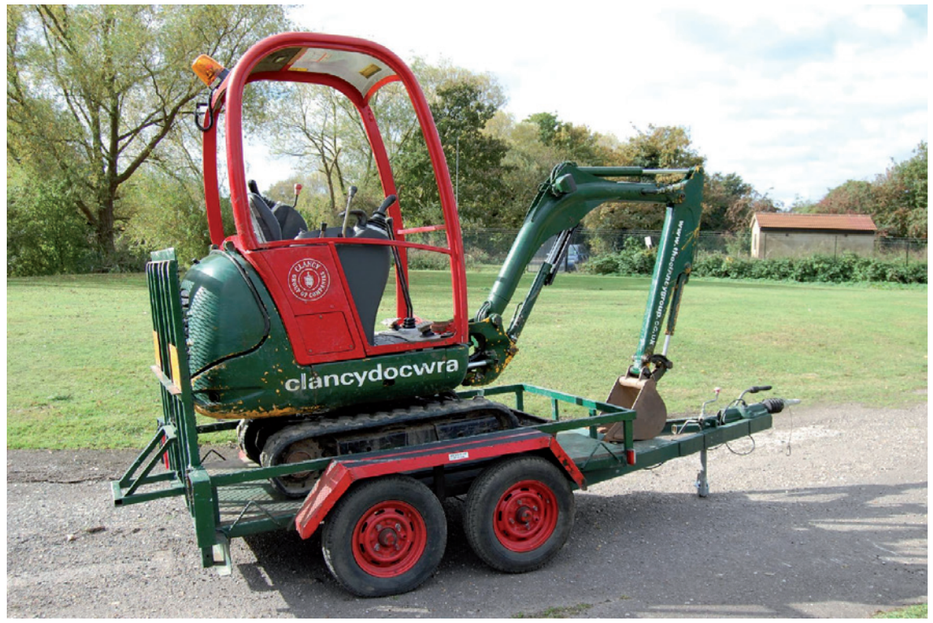


Make the thieves life harder. Equipment removed from trailer and boom arms extended and immobilisers and /or hydraulic locks set preventing ease of theft.

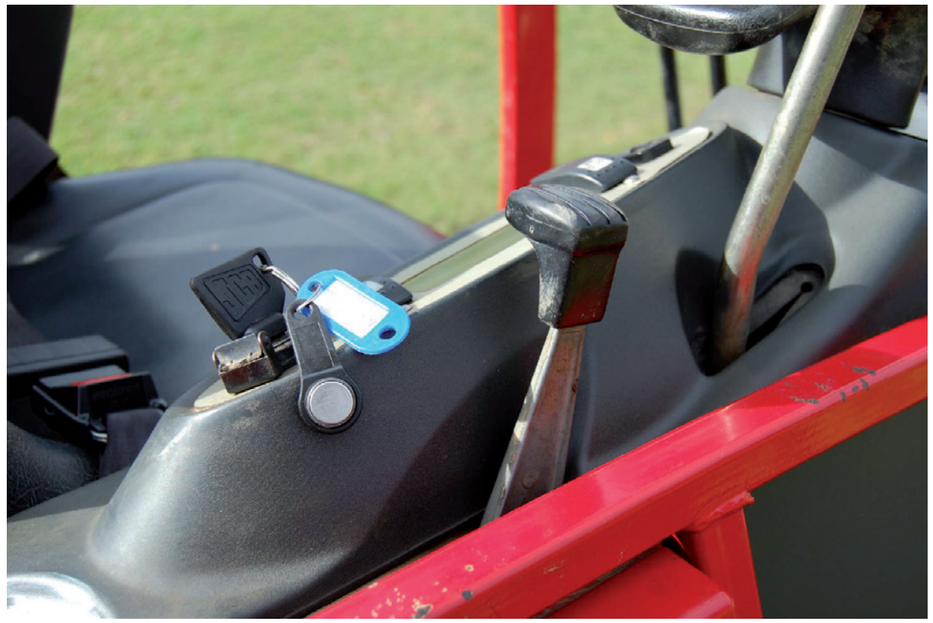


Boom arms and legs extended and immobilisers and/or hydraulic locks set. This telehandler now becomes nearly impossible to remove quickly by theft.

And how not to do it!



This machine will be stolen in a number of seconds... not locked and no hitch lock installed. An expensive mistake.



Obvious but you would be surprised how many people will do it! You don't leave your keys in the transit van but this scene is a familiar sight.

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