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*Plant Update -
Construction Plant and
Agricultural Equipment*

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Plant Theft

Plant theft is a highly organised activity. Professional thieves may ‘steal to order’, targeting specific plant items in advance using the services of legitimate hauliers, freight forwarders and shippers to move to the desired destination.

Another common method of theft is ‘fraudulent conversion’, otherwise known as ‘theft by deception’. False identification is used to hire an item of plant from a plant hire company and the item subsequently disappears.

High risk plant.

- Excavators
- Telehandlers
- Trailers
- Generators
- Dumpers
- Compressors
- Rollers
- Tractors
- Breakers

Cost of plant and agricultural equipment theft.

It is impossible to ascertain the true financial cost of plant theft. It has been estimated to cost the UK between £600 million and £1 billion per year but, as a high proportion of plant is self-insured, accurate figures are hard to obtain and the true figure is much higher.

It is estimated that 10 or more items of plant are stolen each day. If an average value of £10,000 is applied to each piece of equipment stolen, then plant theft typically costs insurance companies on average £100,000 a day. Recovery rates are very low (5%). The theft of plant is perceived by criminals to be low risk / high profit because of:

- Low levels of plant security
- Low risk of detection and prosecution
- New Vehicle Security Assessment (Plant)
- Thatcham 5 Star Rating (Plant)

Whilst prime responsibility for reducing plant theft must lie with plant operators, manufacturers and insurers also have roles to play.

Plant security initiatives.

Thatcham's Vehicle Security Department, under the direction of the Vehicle Security Steering Group (Plant) have been collaborating with the following companies and organisations to develop new strategies in order to combat plant theft and reduce insured losses:

- Construction Industry Theft Solutions (CITS)
- Construction Plant-hire Association (CPA)
- Plant Theft Action Group (PTAG)
- JCB
- Kubota
- Datatag
- ACPO Vehicle Crime Intelligence Service (AVCIS)
- Metropolitan Police

To date the following initiatives have been introduced (in chronological order):

- CESAR
- Stolen Plant and Agricultural Equipment National Intelligence Unit
- British Insurance Industry's Criteria for Agricultural Equipment & Plant

CESAR.

The first major initiative supported by Thatcham was the introduction of Construction Equipment Security and Registration (CESAR). The CESAR scheme has now met Thatcham's TQA requirements and is ready to be used as part of the New Vehicle Security Assessment. The CESAR scheme is designed to encourage the introduction of the marking of plant in a manner comparable to the Vehicle Identification Number (VIN) system used for road vehicles.

Stolen plant and agricultural equipment national intelligence unit.

The second initiative was the creation of the Stolen Plant and Agricultural Equipment National Intelligence Unit which commenced operations on 1st October 2008 and is based at Metropolitan Police Stolen Vehicle Unit headquarters in Chalk Farm, London NW3. The unit comprises two detective constables and a member of police staff. The unit is funded from contributions from Allianz, AVIVA (Norwich Union), Zurich, Royal & Sun Alliance, and HSB Engineering Insurance Ltd. Further funding is derived from sales from CESAR kits fitted to plant and agricultural equipment via the Construction Equipment Association.

³ Table 2: See chart for a list of compliant systems

Examples of Plant in Categories	
Category A	Tractor (tracked/wheeled), Dozer (tracked/wheeled), Loader Tracked/wheeled), Excavator (tracked/wheeled), Motor Scraper, Motor Grader, Dump Truck (articulated), Dump Truck (rigid), Backhoe Loader, Telescopic Handler, Rough Terrain Forklift, Crane (mobile/crawler), Crane (tower), Dragline, Face Shovel, Compactor (soil), Compactor (waste), Crusher, Screener, Conveyor, Concrete Pump (truck/trailer), Pavers, Chip Spreader, Trencher, Road Sweeper, Harvester, Forestry Skidder, Forestry Forwarder, Piling Rig
Category B	Skid Steer Loader, Mini-Excavator, Site Dumper, Quad Bike, Mobile Elevating Work Platforms, Compact Backhoe Loader, Compact Tractor, Ride on Roller (vibratory/dead weight) Trailer
Category C	Rammer, Plate Roller, Lighting Towers, Compressors, Generators, Welders, Pumps, Winches, Access Equipment, Power Packs, Heaters, Dehumidifiers, Power Washers, Chipper, Power Cultivators
Category D	Hydraulic Breaker, Pulveriser, Cutter/Crusher, Grab/Grapple, Shear, Ball, Auger, Sprayer, Spreader, Trailer
Category E	Power Tools (all), Earth Drills, Transformers
Category F	Ladder, Scaffolding, Staging, Shuttering, Fencing

⁴ Table 3: Plant and Agricultural Equipment Category P2 Immobiliser (Original Equipment)

Examples of Plant in Categories					
Company / System	Evaluation No	Feature Code	Fitment Policy	Years	Standard Option / Retrofit
Kubota Anti Theft Plus	TEP1 – 120/010	TSD	KX36	Jan 09 –on	S
			KX41	Jan 09 –on	S
			KX61	Jan 09 –on	S
			KX71	Jan 09 –on	S
			KX91	Jan 09 –on	S
			KX101	Jan 09 –on	S
			KX121	Jan 09 –on	S
			KX161	Jan 09 –on	S
Kubota Anti Theft Plus	TEP1 – 120/010	TSD	U17	Jan 09 –on	S
			U20	Jan 09 –on	S
			U25	Jan 09 –on	S
			U30	Jan 09 –on	S
			U35	Jan 09 –on	S
			U45	Jan 09 –on	S
Caterpillar BHL E Machine Immobiliser System	TEP1 – 11/0705	C3D	422E	Jul 05 – Aug 08	O/R
			428E	Jul 05 – Aug 08	O/R
			432E	Jul 05 – Aug 08	O/R
			434E	Jul 05 – Aug 08	O/R
			442E	Jul 05 – Aug 08	O/R
			444E	Jul 05 – Aug 08	O/R
Caterpillar BHL E Machine Immobiliser System	TEP1 – 12/0809	C3D	422E	Aug 08 – on	O/R
			428E	Aug 08 – on	O/R
			432E	Aug 08 – on	O/R
			434E	Aug 08 – on	O/R
			442E	Aug 08 – on	O/R
			444E	Aug 08 – on	O/R

Table 4: Plant and Agricultural Equipment Category P2 Immobiliser (Aftermarket Systems)

Examples of Plant in Categories					
Company / System	Model	Feature Code	Fitment Policy	Thatcham Evaluation No	Standard option / Retrofit W/Wide
Garos	MODCON 50 MON CL E-REL 9000	K3D C3D	Universal 12/24V	TEP1 – 12/0308	Retrofit
Kosran	ECV 2/3 System	C3D	Universal	TEP1 – 06/0605	Retrofit
Meck Lock	M020 Plus	W H F 3	Universal	TEP1 – 170/0509	Retrofit



British insurance industry's criteria for agricultural equipment & plant.

The third initiative was to review the British Insurance Industry's Criteria for Agricultural Equipment & Plant and update it in line with current developments in technology and plant theft techniques and the:

- Plant Theft Action Group (PTAG) Code of Practice
- Construction Equipment Security and Registration Scheme

The Criteria covers the following key points of plant security:

- Vehicle Identification
- Unique Ignition Key
- Immobilisation Systems (Cat P2)
- Mechanical Locking Devices (Cat P3)
- Peripheral Security
- After-Theft Systems For Vehicle Recovery (Cat 5)

Plant categories.³

The generic term 'plant' covers many different types of equipment designed to perform different functions. A method of categorisation has been developed in order to manage this plethora of diverse machinery.

⁴ See chart list of compliant systems.

New Vehicle Security Assessment (Plant).

The fourth initiative was the drafting of a New Vehicle Security Assessment for Plant (NVSAP). It is based on the original NVSA for cars which has proved to be very effective in reducing insurer risk and driving down crime for passenger cars by 66% since its inception in 1992. The scheme has also gone on to cover LCVs, HGVs and motorcycles.

The assessment uses a 1,000 points rating system and is only applicable to those security components fitted to new agricultural and plant equipment as a standard in production.

⁵ Table 5: Star Rating Table

Functionality	Stars	Requirement
Vehicle Identification Number, Registration Covert Markings	★	CESAR
Electronic / Electromechanical Immobiliser System	★	Thatcham Cat P2
Keys – a unique key for each vehicle. This may be the immobiliser key	★	Thatcham OEM Plant Criteria
Perimeter security cabs with lockable doors and windows	★	Thatcham OEM Plant Criteria
After-Theft System for Vehicle Recovery (May include additional functionality such as fleet management systems)	★	Thatcham Cat P5
The minimum star rating recommended by Thatcham for effective security for new plant is:		
Vehicle Identification Number, Registration Covert Markings	★	CESAR
Electronic / Electromechanical Immobiliser System	★	Thatcham Cat P2
Keys – a unique key for each vehicle. This may be the immobiliser key	★	Thatcham OEM Plant Criteria

Thatcham 5 star rating⁵ (Plant).

The results of the NVSAP are used to create the fifth initiative, the Thatcham 5 Star Rating (Plant),

a simple but effective guide to standard fit security for:

- Plant manufacturers
- Plant insurers
- Plant users