



Criteria for **Theft Resistant Number Plates**





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CUSTOMER SERVICE EXCELLENCE



Theft Resistant Number Plates – A Voluntary Standard Foreword

Theft of number plates from vehicles is a crime that causes not just inconvenience but misery for thousands of people in the United Kingdom. Some of this might be just vandalism, but there is a more calculated reason for it. The vehicle registration mark (VRM) is the key piece of information that DVLA uses to access the vehicle register (the record of all vehicles and their keepers used on UK roads). Some people use stolen number plates to avoid being traced when they commit offences such as speeding, illegal parking or driving away from a petrol forecourt without paying. This can lead to innocent people receiving penalty notices. False number plates are used to avoid detection when committing more serious crimes such as robbery, kidnapping etc. and to disguise the identity of stolen vehicles to make them easier to sell to an unsuspecting buyer. It is of course an offence to display the wrong VRM on a vehicle with a possible fine of up to £1,000.

The Government has taken steps to regulate the supply of number plates by introducing the register of number plate suppliers in January 2003. Any business selling number plates is required by law to keep a record of each sale and to check the customer's driving licence and vehicle registration certificate (or specified alternative documents). This has had some success in closing off legitimate channels for obtaining false plates, but theft of number plates remains a problem.

DVLA wrote to all 52 regional police forces in the UK to discover the extent of number plate theft. Although not all forces record this as a separate crime, we have information indicating that approximately 17,000 plates were stolen in 29 police regions in 2004, including almost 6,000 in the Metropolitan Police region. It would be reasonable to assume that there could have been around 33,000 thefts in the UK over that period, and that does not take account of unreported incidents. In response to this problem, DVLA has been working with number plate manufacturers and others, to develop test criteria to define a theft resistant number plate. This document has been drafted in collaboration with the Home Office Scientific Development Branch, Sold Secure and the Motor Insurance Repair Research Centre (Thatcham). It has also been made available to manufacturers of number plates and number plate components for comment.

This is not a legal standard, but it is intended to provide the consumer with assurance that products meeting the standard have been subjected to rigorous testing. DVLA does not endorse any single product or manufacturer and recognises that it might be possible to develop a variety of technical solutions that would meet the test criteria.

This standard is supported by the Home Office and the Association of Chief Police Officers (ACPO). Meredith Hughes, chief constable South Yorkshire and head of ACPO road policing adds: "Number plate theft appears to be a growing problem. It is a crime in its own right, but also leads to further criminality as stolen plates can be used to disguise vehicle identity. DVLA's initiative to promote theft resistant number plates is welcome".

Frank Whiteley, chief constable Hertfordshire and lead member of ACPO agrees: "I support DVLA's adoption of a standard for theft resistant number plates. If the industry takes up this challenge and more secure number plates become readily available, it should help to reduce this criminal activity."

DVLA welcomes measures to make number plates more secure and endorses the criteria contained in this document. We regard the use of secure plates as a sensible precaution for the motoring public, similar to fitting an anti – theft device to the vehicle itself. All number plates irrespective of whether they meet the theft – resistant criteria must meet the requirements of the Road Vehicles (Display of Registration Marks) Regulations 2002 and the British Standard BSAU 145d.



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Introduction

These Criteria are designed to assist manufacturers to evaluate their products by measuring performance against all known attack methods used in the UK.

The Criteria shall apply to all variations of Number Plates manufactured for the UK market regardless of country of manufacture.

Current attack methods are researched through liaison with UK Police Services and the Home Office.

The Criteria shall be updated as new attack methods are identified.

Number Plates shall be assessed on the following criteria:

- Reliability and Durability
- Replacement Procedure
- Fitting Procedures
- Resistance to Attack

Extension and Derivative Documents

From time to time there will be a requirement to update or develop new specifications. This will be as a result of one or more of the following conditions:

- New types of number plates
- New applications
- New criminal attack methods
- Changes in technology
- Legislative changes
- Market changes
- Changes in testing or validation methods

In response, it will be necessary to re-issue or modify documentation as appropriate.

New Issue

- For major changes, the main issue level number will increment by one, as follows: (Issue 1, 2, 3 ...).
- A complete new document will be published replacing the previous version.

Extension

• For minor changes, not requiring complete new documentation, the issue level will increment as follows: (1.1, 1.2, 1.3...).

Derivative

Extension and Derivative documents will be clearly identified on the front cover and will refer back to an original base document.

The documents will normally only update those sections which have changed with respect to the **original base document**. All other sections remain the same. These derivative documents should therefore be read in conjunction with the **original base document** for a full understanding.



Compliance Procedure

Reliability and Durability

The manufacturer shall supply evidence of compliance with the Road Vehicles (Display of Registration Marks) Regulations 2002 and the British Standard BS AU 145d. Copies of certificates of compliance shall be provided where applicable.

Replacement Procedure

Manufacturers are required to provide details of their policy to issue replacement theft resistant number plates.

Resistance to Attack

Each number plate fitted to vehicles shall resist any known attack method for a minimum period of three minutes, i.e. it shall not be removed in re-useable form in less than three minutes.

Products

Only standard production number plates shall be accepted for evaluation. However, prototype or pre-production devices may be submitted for pre-test consultancy services to assist product design and development as required.

The manufacturer shall supply the following information for the product to be tested and any other information deemed necessary for the purposes of evaluation:

- Technical file
- Method of fixation
- Screws
- Adhesive
- Other

Annual Audit

The test centre will require Gold Samples of the products to be submitted, and an annual audit will be required. Failure to meet these requirements may lead to a product being de-listed.

In the event of failure at the annual audit, a replacement/modified product shall be fully compliant with the requirements of the test criteria within a period specified by the test centre. In no circumstance shall the specified period extend beyond the date for the next audit.

Procedure

- The manufacturer shall specify whether the number plates are designed for general after market fitting, or fitting by a motor dealer, or fitting by an OEM manufacturer. Fitting instructions shall be provided.
- The manufacturer shall specify whether the number plates are designed to be sold in finished form or in the form of components for assembly.
- The use of any tools operated with a stationary or external energy supply, other than a 12 volt vehicle battery, shall not be permitted.
- The use of battery operated tools shall be permitted.
- Two test jigs that simulate the position of a number plate mounted on a:
- vehicle body panel
- vehicle bumper
- shall be used for the initial evaluation.
- Final attack tests may be carried out on a representative vehicle.
- The destructive attack tests employed may result in damage to the theft resistant number plate.
- A new number plate shall be used for each separate and individual attack test, unless the manufacturer and the test centre agree that the device under test has not been damaged such that it is considered unfit for further testing.



- All cutting tools shall be checked for condition and either re-sharpened or replaced as required prior to each test.
- Any adhesive fixings shall be allowed their full cure time before being tested.

Pass Criteria

The intention of the thief is to re-use the number plate. Any number plate which cannot be removed within three minutes or cannot be reused after removal will pass the test.

After removal the complete vehicle registration mark on the number plate shall not be re-usable. The number plate is deemed not to be re-usable if any one of the following occurs:

- The alpha/numeric characters become unreadable at a distance of 20m in normal lighting conditions.
- A portion of the number plate greater than 30% of the area remains affixed to the vehicle.
- The number plate is broken into at least 4 pieces with the largest piece being no greater than 50% of the total area).

In the event of disagreement over the interpretation of these criteria the test centre's decision shall be final.

Attack Test Criteria

Introduction

The purpose of the attack test regime is to determine if the product submitted for assessment will achieve three minutes or more attack resistance per number plate.

The following are utilised during basic 'street' methods of attack:

- Hand Tools
- Modified Tools
- Battery Operated Drills
- Commercially available Screw Removal Tools
- Combination of the above.

Note: For the purpose of this test criteria 'modified' shall mean simple modifications utilising commonly available battery and hand tools. The use of tools operated with a stationary or external energy supply (including gases) shall not be permitted.

Attack Tests

The technical file and method of fixation of the theft resistant number plate shall be examined to determine potential areas of weakness.

Tools and methods will be selected to test potential areas of weakness and a test schedule shall be created.

Test Schedule

Example 1

Manufacturer: XYZ Ltd Examiner: A.N. Other Date: 1/1/06

Theft Resistant Number Plate Fixed to Body Panel							
Tests	Tools	Time	Pass	Fail	Comments		
1	Philips Screwdriver						
2	Battery Drill & screw extractor						

Example 2

Manufacturer: XYZ Ltd Examiner: A.N. Other Date: 1/1/06

Theft Resistant Number Plate Fixed to Bumper								
Tests	Tools	Time	Pass	Fail	Comments			
1	Philips Screwdriver							
2	Battery Drill & screw extractor							
3	Hammer & Wedges							



Commercially Available Devices

Commercially available devices that may be used modified or adapted to remove number plates, shall be included in the test regime.

Number plate manufacturers shall be notified of any new attack methods that may appear on the 'street'.

Adoption of Revised Criteria

Whilst every effort has been made to make the criteria as comprehensive as possible, there is no guarantee that new theft methods may not evolve over time.

Any modification to the testing/accreditation regime and an appropriate period for manufacturers to make changes shall be subject to consultation between DVLA, testing organisations, manufacturers and other interested parties such as the police.

Appendix 1

Tool List

Club Hammer (1 Kilogram) Hammer (1Ib) Pry bar Chisels Punches Centre Punch Wedges Screwdrivers • Slotted tip • Pozidrive • Philips Abrafile Hacksaw Padsaw

Craft knife

Tinned Copper wire

Waxed twine

Cheese wire

Battery drill

- Drill Bits (1mm 13mm)
- Hole saw
- Screwdriver bit
- Pozidrive bit
- Philips bit
- Screw extractor

Pliers

Allen Keys

Sockets and Spanners

Vice grips (moles)

Hot air gun

Palett knife

Double Sided Adhesive Tape

Solvents

- Petrol
- White Spirit
- Metholated Spirit
- Paint Thinners
- Bleach

