

SPECIFICATION
TYRE TREAD DEPTH GAUGES
FOR TESTING
ALL CLASSES OF VEHICLE

Issue Date: 10 December 1999

CONTENTS

	Page
1. Introduction	2
2. Technical Requirements	2
2.1 All Devices	2
2.2 Mechanical Devices	2
2.3 Electronic Devices	2
3. Calibration	3
3.1 Mechanical Devices	3
3.2 Electronic Devices	3
3.3 Accuracy	3
4. Operating Instructions	3
5. Identification	3

MOT Scheme Management
Vehicle Inspectorate
Berkeley House
Croydon Street
BRISTOL BS5 0DA
Tel. 0117 954 3277
Fax. 0117 954 3440

1. INTRODUCTION

This Specification details the MINIMUM performance and constructional requirements for Tyre

Tread Depth Gauges intended to be used for the statutory annual tyre tread depth testing of all Classes of vehicle in accordance with the Motor Vehicle (Tests) Regulations 1981, as amended. The Specification is applicable also for Tyre Tread Depth Gauges intended to be used for the statutory annual tyre tread depth testing of Heavy Goods Vehicles in accordance with the Goods Vehicles (Plating and Testing) Regulations 1988, as amended.

The Specification does not rule out additional features supplied with the equipment provided that the features are acceptable on health and safety grounds and do not prevent or make it more difficult to carry out the MOT Test as prescribed.

2. TECHNICAL REQUIREMENTS

The Tyre Tread Depth Gauge shall be capable of checking the depth of tread pattern grooves of tyres on all classes of vehicle. It shall be robustly constructed to acceptable engineering standards and safe to use.

2.1 All Devices

The Tyre Tread Depth Gauge shall;

- a. indicate depth in units of millimetres (mm)
- b. have a maximum display value of at least 8 mm
- c. retain the tyre tread depth reading until manually reset

2.2 Mechanical Devices

On traditional, mechanical, direct reading devices, there shall be;

- a. a clearly marked zero depth
- b. depth markings at intervals of at least one millimetre
- c. a clearly marked tyre tread depth of 1.6 mm
- d. lines of no wider than 0.1 mm to indicate tyre tread depth
- e. lines clearly, durably and permanently marked on the gauge

Note: The machine used to inscribe the depth markings shall be certified by a NAMAS accredited calibration authority that it is accurate to at least 0.01 mm and the relevant certificate shall be made available for inspection at approval.

The tip of the measuring probe shall be made of a suitable material and;

- f. for at least the first 2 mm of length,
 - i) have a thickness of not less than 0.4 mm and not more than 0.8 mm
 - ii) have a width of not more than 3.0 mm
- g. be substantially flat with no sharp edges

2.3 Electronic Devices

Electronic or other devices shall meet the principle of the requirements listed in 2.1 and 2.2 above, as applicable.

3. CALIBRATION

3.1 Mechanical Devices

The means of calibration is to check that the zero reading is correct by placing the Tyre Depth

Gauge on a hard, perfectly flat surface. If the zero reading is correct and no obvious physical damage to the device is apparent, it can be assumed that all other markings are correct.

3.2 Electronic Devices

A means of calibration must be available and shall:

- a. be suitable for checking measurement accuracy at the following values;
0, 1, 1.6, 3, 5 and 8 mm
- b. have a method and operational accuracy that is traceable to a national physical standard
- c. be certified by a UK NAMAS accredited laboratory, or an equivalent European laboratory, that it is traceable to a national physical standard.

3.3 Accuracy

Tyre tread depth readings shall be accurate to within;

+/- 0.01 mm.

4. OPERATING INSTRUCTIONS

Operating instructions shall be supplied with each Tyre Tread Depth Gauge.

The operating instructions shall;

- a. be written in English
- b. explain how to use the Tyre Tread Depth Gauge and, with mechanical devices, explain that pressure exerted on the tip of the measuring probe must not be such as to cause false or variable readings
- c. detail the frequency and procedure for calibrating the Tyre Tread Depth Gauge

Note: Inclusion of the calibration procedure in the operating instructions is applicable only if calibration equipment is to be offered to the purchaser of the Tyre Tread Depth Gauge. If not, a description of the calibration procedure shall be made available for assessment at the approval stage.

5. IDENTIFICATION

The Tyre Tread Depth Gauge shall be marked with a durable identification on the exterior showing the make, model and serial number. A serial number will not be necessary on a traditional, mechanical, direct reading Tyre Tread Depth Gauge but it shall be necessary on more sophisticated devices where any electronic or other modern technology is used in the measurement process.