

BOSCH



Automotive Handbook

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Foreword to the 5th Edition

The "Automotive Handbook", a reliable guide full of up-to-date and concise information, has grown over a period of six decades from a calendar supplement of 96 pages to a 960-page reference work. In that time, over a million copies have been produced worldwide and the text translated into numerous languages.

The 5th edition, in common with its predecessors, is supported by two main pillars: the expertise of the technical staff at our company and in the automotive industry. They have fully revised the contents of this manual and brought it completely up to date. Thanks are due to all those involved. This book is intended primarily as a source of important facts and figures and as a review of present-day technology for the automotive engineer and technician, but also for anyone else with an interest in technical matters. Accordingly, the automotive technology content is restricted to passenger cars and commercial vehicles, and the remaining content to that required for practical purposes.

Within the framework of a pocketbook it is impossible to present detailed coverage of individual technical subjects. On the other hand, bearing in mind the very wide range of readers, we do not want to dispense with generally applicable topics and data. However, we have dispensed with the "Conversion Tables" as the calculator is now an everyday item of equipment and any figure required can easily be calculated using the conversion formulas provided. The chapter "Road Traffic Legislation (Germany)" has also been deleted due to the international usage of the booklet.

These deletions have made way for new and updated topics which have added an extra 70 pages to the book.

We recommend readers to scan through the "Automotive Handbook" in order to gain an overall impression before using it.

The Editors

For you

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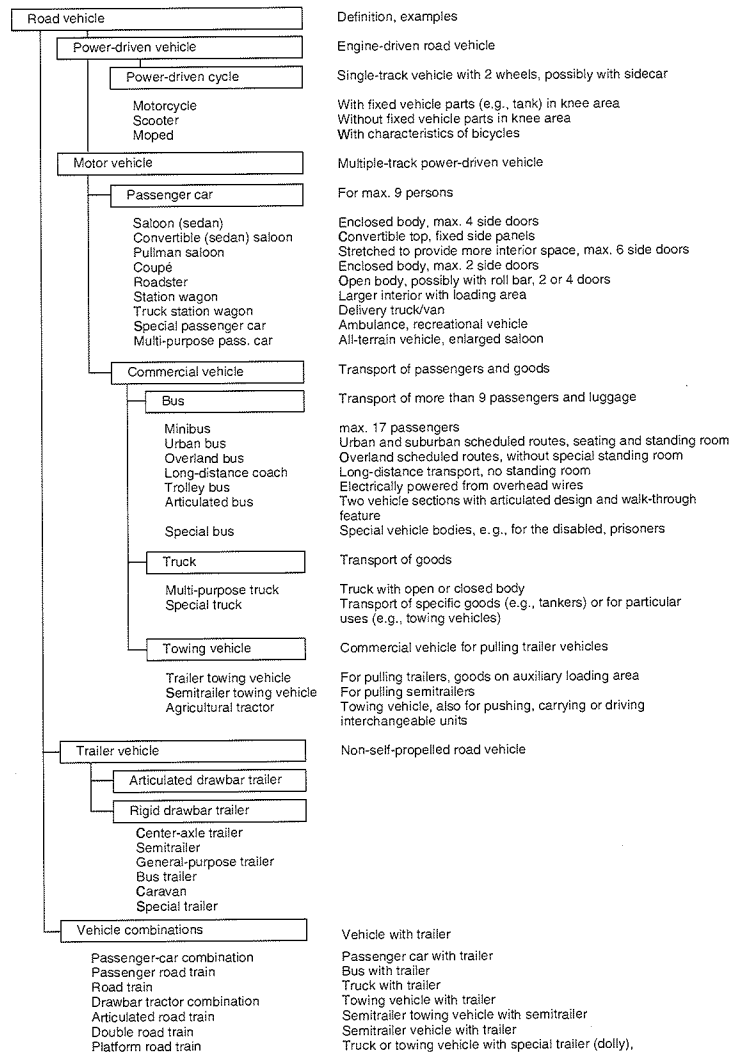
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Road-vehicle systematics

Classification¹⁾

Category L

Motor vehicles with fewer than 4 wheels, motorized two-wheeled and three-wheeled vehicles.

Category	Design	Piston displacement	Top speed
L ₁	two-wheeled	≤ 50 cm ³	≤ 50 km/h
L ₂	three-wheeled	≤ 50 cm ³	≤ 50 km/h
L ₃	two-wheeled	> 50 cm ³	> 50 km/h
L ₄	three-wheeled asymmetrical to longitudinal vehicle axis	> 50 cm ³	> 50 km/h
L ₅	three-wheeled symmetrical to longitudinal vehicle axis	> 50 cm ³ ≤ 1 t Total weight	> 50 km/h

Category M

Passenger vehicles with at least 4 wheels or with 3 wheels and an overall weight > 1 t.

Category	Driver's seat + passenger seats	Total weight
M ₁	1 ≤ 9	
M ₂	> 9	< 5 t
M ₃	> 9	> 5t

Category N

Goods transport vehicles with at least 4 wheels or with 3 wheels and a laden weight > 1 t.

Category	Total weight
N ₁	≤ 3.5 t
N ₂	> 3.5 t ≤ 12 t
N ₃	> 12 t

Category O

Trailers and semitrailers

Category	Total weight
O ₁ , only single-axle trailers	
O ₂	
O ₃	
O ₄	

¹⁾ Vehicle classification in accordance with the Directives of the European Community (71/320/EEC) and ECE Regulation No. 13 with regard to brake equipment.

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