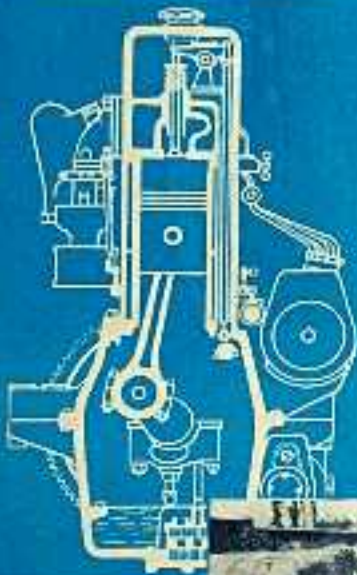


TECHNICAL FUNDAMENTALS

Automotive Engineering



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compiled and arranged by

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PREFACE

Day and night, millions of motorists all over the world are rolling through cities and over vast trunk roads. Everybody knows the hours of day when traffic—especially in big cities—is so heavy that it seems to be a maelstrom apparently not to be disentangled; and merely a clever system of traffic rules is the reason why this endless stream of vehicles will not suddenly form a chaos with no way leading out.

Therefore, it is indispensable that every motorist knows and respects the traffic rules of his country conscientiously. But it is likewise indispensable that he is acquainted with the construction of his vehicle, that he knows how to attend it and how to repair sudden troubles. It is rather inconvenient if the engine falls suddenly at some intersection of traffic. Within a few minutes, hundreds of vehicles have accumulated and the ill-considered fellow is completely staggered by the deafening howling of the other vehicles. Likewise embarrassing it is, of course, if the motorist—far away from any traffic—has a breakdown of some kind and is compelled to await in helpless condition the approaching night. In order to keep a cool head even in such situations it is required to know the troubles, their diagnosis and quick repair. This, however, can be achieved only by a motorist thoroughly acquainted with the construction of his vehicle and with the performance of its main parts.

This book has been written for motorists who are permanently on the road and are frequently left to their own resources. The demonstration of the construction and the performance of the various components of the motorcar have been based on principal descriptions. This was necessary in order to instruct the reader in the technical processes frequently very difficult to understand. In addition, it is not possible within the scope of this book to discuss on all technical variants occurring with the plurality of models in traffic.

Numerous practical directions for repairing troubles suddenly occurring on the vehicle are given in tabulated form. However, it must be stressed that major repairs have to be performed in workshops staffed with skilled personnel and equipped with the single-purpose tools required.

The Author

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