

1. Record Nr.	UNINA9910299749503321
Titolo	Fundamentals of Automotive and Engine Technology : Standard Drives, Hybrid Drives, Brakes, Safety Systems // edited by Konrad Reif
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Vieweg, , 2014
ISBN	3-658-03972-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (286 p.)
Collana	Bosch Professional Automotive Information, , 2570-4559
Disciplina	629.2
Soggetti	Engines Machinery Automotive engineering Engine Technology Automotive Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	History of the automobile -- History of the Diesel engine -- Areas of use for Diesel engines -- Basic principles of the Diesel engine -- Basic principles of Diesel fuel-injection -- Basic principles of the gasoline engine -- Inductive ignition system -- Transmissions for motor vehicles -- Motor vehicle safety -- Basic principles of vehicle dynamics -- Car braking systems -- Vehicle electrical systems -- Overview of electrical and electronic systems in the vehicle -- Control of gasoline engines -- Control of Diesel engines -- Lighting technology -- Electronic stability program -- Adaptive cruise control -- Occupant-protection systems -- Hybrid drives -- Operation of hybrid vehicles -- Regenerative braking system -- Service technology.
Sommario/riassunto	Hybrid drives and the operation of hybrid vehicles are characteristic of contemporary automotive technology. Together with the electronic driver assistant systems, hybrid technology is of the greatest importance and both cannot be ignored by today's car drivers. This technical reference book provides the reader with a firsthand comprehensive description of significant components of automotive technology. All texts are complemented by numerous detailed

illustrations. Contents History of the automobile.- History of the Diesel engine.- Areas of use for Diesel engines.- Basic principles of the Diesel engine.- Basic principles of Diesel fuel-injection.- Basic principles of the gasoline engine.- Inductive ignition system.- Transmissions for motor vehicles.- Motor vehicle safety.- Basic principles of vehicle dynamics.- Car braking systems.- Vehicle electrical systems.- Overview of electrical and electronic systems in the vehicle.- Control of gasoline engines.- Control of Diesel engines.- Lighting technology.- Electronic stability program.- Adaptive cruise control.- Occupant-protection systems.- Hybrid drives.- Operation of hybrid vehicles.- Regenerative braking system.- Service technology. The target groups Motor-vehicle technicians in education and vocational training Master-mechanics and technicians in garage-workshops Teachers and lecturers in vocational schools Students at universities and technical colleges And all those interested in automotive engineering About the Bosch Group Bosch is the world's largest independent supplier of parts and equipment for motor vehicles. Innovations by Bosch have shaped the development of the automobile. Bosch's dominant technological role in many fields is demonstrated by the fact that it has the most patent applications in automotive engineering in Germany, to the European Patent Office and in the USA.
