

1. Record Nr.	UNINA9910299463003321
Titolo	Diesel Engine Management : Systems and Components // edited by Konrad Reif
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Vieweg, , 2014
ISBN	3-658-03981-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (381 p.)
Collana	Bosch Professional Automotive Information, , 2570-4559
Disciplina	621.436 629.2506
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 diesel engine -- Areas of use for diesel engines -- Basic principles of the diesel engine -- Fuels: Diesel fuel -- Fuels: Alternative fuels -- Cylinder-charge control systems -- Basic principles of diesel fuel-injection -- Overview of diesel fuel-injection systems -- Fuel supply to the low pressure stage -- Overview of discrete cylinder systems -- Unit injector system -- Unit pump system -- Overview of common-rail systems -- High pressure components of the common-rail system -- Injection nozzles -- Nozzle holders -- High pressure lines -- Start assist systems -- Minimizing emissions inside of the engine -- Exhaust-gas treatment -- Electronic diesel control -- Electronic control unit -- Sensors -- Fault diagnostics -- Service technology -- Exhaust-gas emissions -- Emissions-control legislation -- Exhaust-gas measuring techniques.
Sommario/riassunto	This reference book provides a comprehensive insight into todays diesel injection systems and electronic control. It focusses on minimizing emissions and exhaust-gas treatment. Innovations by Bosch in the field of diesel-injection technology have made a

significant contribution to the diesel boom. Calls for lower fuel consumption, reduced exhaust-gas emissions and quiet engines are making greater demands on the engine and fuel-injection systems.

Contents History of the diesel engine.- Areas of use for diesel engines.
- Basic principles of the diesel engine.- Fuels: Diesel fuel.- Fuels: Alternative fuels.- Cylinder-charge control systems.- Basic principles of diesel fuel-injection.- Overview of diesel fuel-injection systems.- Fuel supply to the low pressure stage.- Overview of discrete cylinder systems.- Unit injector system.- Unit pump system.- Overview of common-rail systems.- High pressure components of the common-rail system.- Injection nozzles.- Nozzle holders.- High pressure lines.- Start assist systems.- Minimizing emissions inside of the engine.- Exhaust-gas treatment.- Electronic diesel control.- Electronic control unit.- Sensors.- Fault diagnostics.- Service technology.- Exhaust-gas emissions.- Emissions-control legislation.- Exhaust-gas measuring techniques.

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.
