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Titolo	Gasoline Engine Management [[electronic resource]] : Systems and Components // edited by Konrad Reif
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Soggetti	Engines Machinery Automotive engineering Engine Technology Automotive Engineering
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Note generali	Includes index.
Nota di contenuto	History of the automobile -- Basics of the gasoline engine -- Fuels -- Cylinder-charge control systems -- Gasoline injection systems over the years -- Fuel supply -- Manifold fuel injection -- Gasoline direct injection -- Operation of gasoline engines on natural gas -- Ignition systems over the years -- Inductive ignition systems -- Ignition coils -- Spark plugs -- Electronic control -- Sensors -- Electronic control unit -- Exhaust emissions -- Catalytic emission control -- Emission control legislation -- Exhaust-gas measuring techniques -- Diagnosis -- Development of the electronic control unit.
Sommario/riassunto	The call for environmentally compatible and economical vehicles necessitates immense efforts to develop innovative engine concepts. Technical concepts such as gasoline direct injection helped to save fuel up to 20 % and reduce CO2-emissions. Descriptions of the cylinder-charge control, fuel injection, ignition and catalytic emission-control systems provides comprehensive overview of today's gasoline engines. This book also describes emission-control systems and explains the diagnostic systems. The publication provides information on engine-management-systems and emission-control regulations. Contents

History of the automobile.- Basics of the gasoline engine.- Fuels.- Cylinder-charge control systems.- Gasoline injection systems over the years.- Fuel supply.- Manifold fuel injection.- Gasoline direct injection. - Operation of gasoline engines on natural gas.- Ignition systems over the years.- Inductive ignition systems.- Ignition coils.- Spark plugs.- Electronic control.- Sensors.- Electronic control unit.- Exhaust emissions.- Catalytic emission control.- Emission control legislation.- Exhaust-gas measuring techniques.- Diagnosis.- Development of the electronic control unit. 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.
