Gasoline-engine management Basics and components

BOSCH



Automotive Technology

• EGAS electronic throttle control

· Gasoline direct injection

• NO_x accumulator-type catalytic converter





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The call for environmentally compatible and economical vehicles, which nevertheless must still satisfy demands for high performance, necessitates immense efforts to develop innovative engine concepts. The increasingly stringent exhaust-gas legislation initially caused the main focus of concentration to be directed at reducing the toxic content of the exhaust gas, and the introduction of the 3-way catalytic converter in the middle of the eighties was a real milestone in this respect.

Just lately though, the demand for more economical vehicles has come to the fore-front, and direct-injection gasoline engines promise fuel savings of up to 20%. This Yellow Jacket technical instruction manual deals with the technical concepts employed in complying with the demands made upon a modern-day engine, and explains their operation.

Another Yellow Jacket manual explains the interplay between these concepts and a modern closed and open-loop control system in the form of the Motronic. This manual is at present in the planning stage.



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