Diagnostics and spare parts **from a single source**

The business division Automotive Aftermarket provides workshops and the trade with complete system know-how from the leading supplier.

Vehicle parts

- Provision, sales and logistics
- Worldwide logistics network
- More than 130,000 different replacement parts

Diagnostics

- Active support covering different brands
- Test equipment
- ESI[tronic] software
- Service Training
- Technical hotline and knowledge database

More information under:
www.bosch.com

AA/XXX 1 987 XXX XXX/200XXX 64.XX.XX

Where to find original Bosch quality:

BOSCH
Invented for life

Bosch products:
More mileage, less fuel

BOSCH
Invented for life

Greater enjoyment, fewer stops for fuel

For many motorists, fuel economy is a prime concern
Lower fuel consumption means more miles to the gallon with fewer CO_2 emissions. More and more drivers are becoming aware of the need to save fuel, particularly in view of ever-increasing gasoline and diesel prices.

Emphasis on innovation
When developing engine components, Bosch concentrates on fuel economy and preservation of the environment. Close cooperation with vehicle manufacturers ensures that components are designed to make engines even more efficient and as a result more economical. In this way innovative products help motorists to save money.

Expert support to maintain mobility
Engine components such as lambda sensors, spark plugs, filters and injectors are subject to heavy loads with the resultant natural wear. These components should therefore be checked at regular intervals and replaced as necessary. Your local workshop can provide support and practical assistance as suppliers of top-quality Bosch products. Only parts in excellent working order can function effectively and help to save fuel.


Lower consumption means: Fewer trips to the gas station


Low fuel consumption keeps customers happy

Used lambda sensor

New lambda sensor

Regular checking and replacement are therefore vital

There are any number of good reasons why motorists should make sure their Bosch lambda sensors are always in top condition:

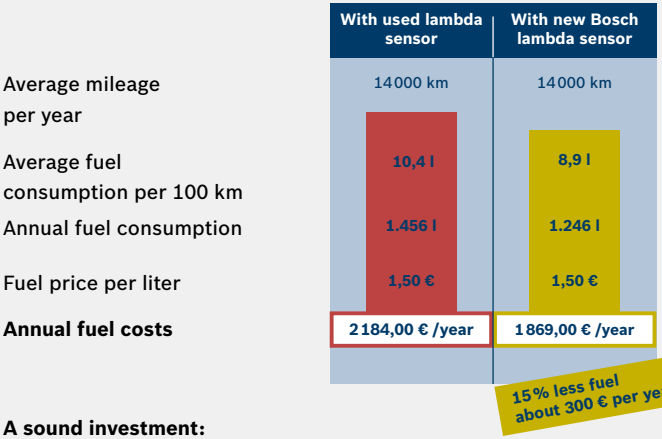
- To gain up to 15 % fuel saving compared to a used lambda sensor
- To avoid expensive catalytic-converter damage
- To comply with stringent emission standards
- To obtain better performance

Reduced fuel consumption with new **lambda sensors from Bosch**

Lambda sensors are subject to extreme operating conditions

A properly functioning lambda sensor forms the basis for reliable engine operation and thus fuel economy, low pollutant emissions and correct emission values. Bosch lambda sensors are unbeatable thanks to their long service life, excellent operation and optimum engine compatibility.

Save money on every journey



A sound investment:

15 % lower fuel consumption or a saving of around 300 € per year (with an annual mileage of 14,000 km and a fuel price of 1.50 € per liter)

Used spark plug

New spark plug

The effects of heavy duty:
Left: Severe spark-plug deterioration can lead to misfiring, particularly on acceleration, as well as poor starting performance. **Right:** A spark plug in perfect working order.

Old spark plugs cost money

Saving on spark plugs is false economy. Worn spark plugs

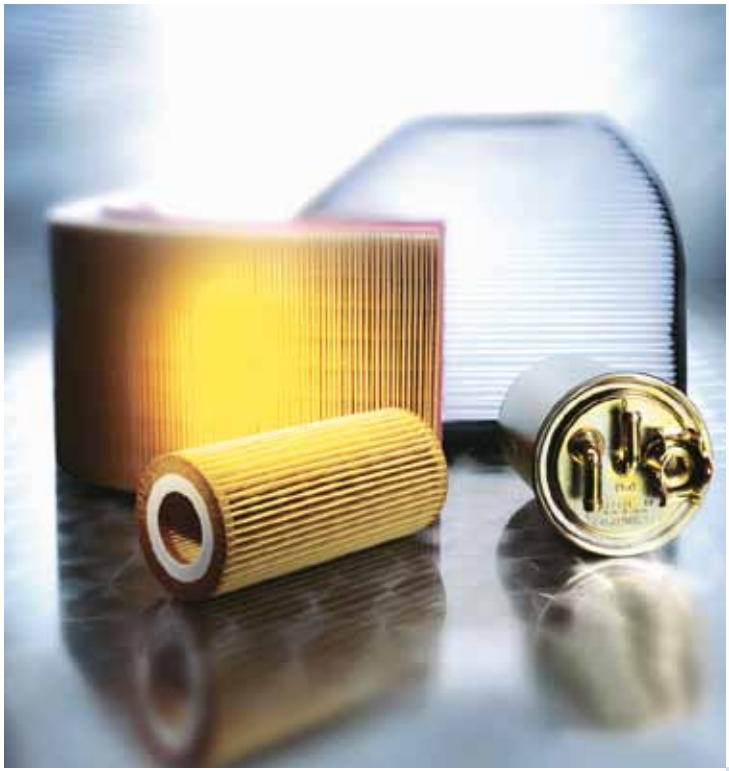
- are the main cause of misfiring
- inefficient fuel combustion
- prevent optimum engine performance
- are one of the reasons for excessive fuel consumption

Regular replacement for greater economy: **Spark plugs from Bosch**

Spark plugs have a lot to deal with. The demands on these engine components are particularly extreme on starting and at maximum power. The everyday mix of urban, open road and motorway driving however also takes its toll. Whatever the conditions, perfect operation is always essential. Timely spark-plug replacement guarantees more efficient fuel economy. In other words, new spark plugs help to save fuel.

Innovative technology for reliable ignition

Compound center electrode with copper core: Guards against thermal overload and misfiring.



The clean way to save:
Filters from Bosch

Modern vehicles are fitted with a whole range of filters to ensure clean and reliable operation. These need to be checked and replaced regularly to ensure long-term efficiency.

Air filters – a breath of fresh air for the engine
Contaminated air filters prevent an adequate supply of air to the engine. New air filters

- provide for an ideal air/fuel ratio in the engine
- prevent the emission of unburnt fuel (Black exhaust fumes)
- ensure optimum engine performance
- help to reduce CO_2 emissions

Fuel-filter – replacement good for the engine and the driver´s pocket
If fuel filters are contaminated or clogged, the fuel will not be cleaned properly and not enough fuel will enter the combustion chamber. This can have serious consequences:

- Severe damage to the engine
- Lack of acceleration
- Inefficient combustion and thus less than optimum fuel utilization

Cabin filters – fresh air and less expense
A contaminated cabin filter hinders proper air-conditioner operation. This means:

- Greater air-conditioner energy input to achieve the required output
- Additional fuel consumption

Black exhaust fumes – an indication of inefficient fuel consumption.

Geared to excellent engine performance: **Injectors from Bosch**

Injectors are designed to supply the engine with the correct amount of fuel as required for each and every operating condition. A defective injector can lead to higher injected fuel quantities and thus to excessive fuel consumption.

Engines benefit from timely injector replacement
Only perfectly functioning injectors can provide motorists with an assurance of:

- Lowest possible fuel consumption
- Greatly improved starting performance
- Instant acceleration
- Longer service life for emission-specific components
- No misfiring

Defective injectors | Correctly functioning injectors

Defective injectors – higher fuel consumption
There may be a (mechanical) problem as shown in the illustration above even if signal patterns are correct and functional testing was successful. The following symptoms are an indication of injector malfunctioning:

- Engine-speed fluctuations (particularly at idle)
- Lack of power (especially on acceleration)
- Increased fuel consumption
- Higher emission values
- Cold-starting problems
- Catalytic-converter damage

A defective injector may be responsible for an unsteady engine speed.