

## YOUR BENEFITS AT A GLANCE:

- bw hazardous emissions and efficient fuel consumption thanks to optimum coordination with the relevant engine, high precision fuel injection and combustion.
- Minimising soot deposits to optimise cold start emissions.



- solator made from high-grade technical ceramics for 100% safety.
- Optimum coordination for secure ignition and protection for engine and catalytic converter.
- Pevention of leakage current and the nuisance of ignition failure.



- lean combustion for a long engine life.
- Aprecise thermal value prevents overheating.
- Housing surface treated to prevent corrosion.



### Insist on Original BMW Parts.

Decisions based solely on price tend to overlook essential criteria like quality, operational reliability, precision fitting and useful life.

Original BMW Parts are optimised to your BMW model and must fulfil the same quality standards as our BMW vehicles.

The fitted precision and high quality of each and every part ensure the harmonious interaction between the vehicle system's functionality and operating principle. Maintain your BMW in its original condition with Original BMW Parts.

#### To make sure your BMW stays a BMW.

For further details see: www.bmw.com/parts

# PRECISE SPARKING FOR EFFICIENT COMBUSTION.

**ORIGINAL BMW SPARK PLUGS.** 

### DID YOU KNOW?

The spark plug **gives spark-ignition engines** (whether gasoline or gas fuelled) **the decisive impulse**. It consists of a central electrode, ceramic isolator, steel casing and one or more ground electrodes.

The spark plug is located in the cylinder head and **transfers an ignition spark to the compressed mix of fuel and air**.

As a pioneer in digital engine technology, BMW has made a significant contribution to the development of suitable spark plugs.

Exact coordination between the spark plug design and material and the relevant combustion process increases the lifespan of a spark plug and ensures secure sparking.

Optimum coordination also prevents soot deposits and therefore avoids malfunctions, favouring cold start, idling and acceleration performance.



# TECHNOLOGY LEXICON. **BMW EfficientDynamics: High-precision injection.**

Innovative BMW Direct Gasoline High-precision injection ensures more efficient fuel combustion. The result is greater engine performance and significantly reduced consumption.

Injectors are used to inject a cloud of gasoline and air the size of your thumbnail **precisely at the spark plug** and this is burned with a significant surplus of oxygen.



The **fast and flexible electronic control** means that the timing and volume of injections can be adjusted to the required performance. **This ensures controlled, clean and efficient combustion in every driving situation.** 



### **ORIGINAL BMW SPARK PLUGS...**

- ... have a casing made from surface-treated steel. This treatment prevents corrosion and ensures that the thread does not stick tight even after long use, so that the aluminium cylinder head remains undamaged.
- ... effectively prevent leakage currents. The material and geometry between the spark plug and the spark coil are perfectly coordinated. Thus, the ignition spark is produced at the point where it is required: in the combustion chamber between the electrodes.
- ... prevent deposits and malfunctions. This mainly favours the cold start characteristics, while the engine runs more smoothly when idling and acceleration performance is secure.
- ... are the result of a close development partnership with spark plug specialists. The spectrum ranges from ground electrodes to side electrodes and from air gap to creepage spark technology.
- ... have an isolator made from high-grade technical ceramics.

  This material is capable of withstanding difficult mechanical, thermal and chemical conditions.