



# Technology that Makes Sparks Fly: Spark Plugs from Bosch



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# Original Equipment Quality for the Aftermarket: the Bosch Spark Plug Range



The Bosch spark plug range has just the right spark plug for every vehicle – perfectly matched to the characteristics of the engine concerned.



**Bosch spark plugs are the motorists' favorite:** The readers of the German automobile magazine “auto motor und sport” have once again voted Bosch as the best brand in the spark plugs category.

## As Diverse as the Requirements

Despite the variety on offer, it is easy to find the right product in the Bosch spark plug range. Different advantages are gained from the use of different electrode alloys to suit each particular engine. Depending on the electrode alloy, the spark plugs bear the designations Bosch Platinum, Bosch Double-Platinum, Bosch Iridium, Bosch Double-Iridium, Bosch Silver or simply Bosch\*.

\*Previously: Bosch Super, Bosch Super plus

# The Benefits of Outstanding Spark Plug Technology from Bosch

Original equipment quality	▶ From Europe's leading original equipment supplier
Broad market coverage	▶ The right spark plug for almost every engine
Innovative alloys	▶ With nickel, yttrium or precious metals ▶ For a longer service life and improved ignition energy transmission
Optimized electrode geometry	▶ Profiled ground electrode, pin-to-pin, multiple ground electrodes ▶ For ideal ignitability
Heavy-duty ceramic mixtures	▶ Specially developed to meet the demands of modern engines ▶ Optimum dielectric strength against high voltages with reduced wall thicknesses
Innovative laser welding technique	▶ Top reliability and service life
Copper core	▶ Enhanced heat dissipation ▶ Provides protection against pre-ignition and soot deposits
Also for gas engines	▶ All Bosch spark plugs guarantee top performance for both gasoline and gas (CNG, LPG) operation
Motorsport innovations	▶ Incorporated into spark plug production for regular vehicles

## Modern New Packaging Design

- ▶ Modern concept with the emphasis on technology
- ▶ Easy to find on the shelf
- ▶ Clear identification of Bosch brand thanks to white strip with Bosch logo on blue packaging
- ▶ Product illustration, information field with electrode gap and tightening torque along with installation instructions printed on the packaging
- ▶ High stability for reliable spark plug protection during transportation and for storage
- ▶ QR code for quick access to additional information



**The procedure has not changed in any way:**  
The order numbers, applications, type designations, short ID numbers and EAN codes are all still the same.

# Quality that Sets the Benchmark: Spark Plug Technology from Bosch

The spark plug has a name that is world renowned: Bosch. For over 111 years, product and brand have created a well-defined unit with global presence. Not only did Robert Bosch innovate ignition with a patent for spark plugs in 1902, the company that bears his name has continued to stay ahead of the engine technology curve. Install this innovative technology for peak engine performance with Bosch spark plugs.

## Electrode Alloys for Every Requirement

Different advantages are gained from the use of different electrode alloys to suit each particular engine. Depending on the electrode alloy, the spark plugs bear the designations Bosch, Bosch Platinum, Bosch Double-Platinum, Bosch Iridium, Bosch Double-Iridium or Bosch Silver.

## Nickel Alloy Electrodes

In Bosch spark plugs, the center electrode consists of a wear resistant nickel alloy with a copper core. The copper core has high thermal conductivity for protection against thermal overload.

## Cup Connection Technology

In order to make engines more efficient, vehicle manufacturers are reducing the engine capacity or the number of cylinders (down-sizing) and simultaneously increasing the charge air pressure. This requires a higher ignition voltage which in turn demands better flashover resistance in the insulator. Bosch has developed special spark plugs for this, in which the insulator is extended by approx. 8 mm. To compensate for this extension, the spark plug contains a stud with a cup as a contact connection. The contact pressure spring of the spark plug connector is centered in the cup.





### Precious Metal Electrodes

Modern engines operate at particularly high combustion chamber temperatures. This also places strain on the spark plugs. This increases the wear on the electrodes, so materials with improved scorch resistance must be used to compensate for this accordingly. In this case, Bosch relies on precious metal alloys with platinum, iridium or silver.

#### Advantages:

- ▶ The center electrode made from a nickel alloy and featuring a welded precious metal pin ensures a long service life and ignition sparks with greater energy
- ▶ High wear resistance, resistant to chemical influences in the combustion chamber
- ▶ Improved spark plug efficiency
- ▶ Highly resistant to material erosion
- ▶ Perfect dispersion of flame front on all sides

- ▶ Ideally suited to gas operation due to long service life
- ▶ Reduced ignition voltage, optimal for turbocharged engines
- ▶ Very smooth running and superior engine elasticity
- ▶ Engine and catalytic converter protection

### Spark Plugs for Gas Operation

Cars that are operated by gas are on the increase. The number of newly registered and retrofitted gas vehicles is growing steadily. As a pioneer of automobile technology, Bosch also assumes responsibility for gas-operated vehicles. Bosch offers you the correct spark plug for any gas-operated vehicle – in original equipment as well as for conversions. As spark plugs are more heavily loaded during gas operation, the change intervals become shorter: around 15 000 km using standard spark plugs and around 30 000 km using platinum spark plugs.



### Bosch Pin-to-Pin Spark Plugs

With Bosch pin-to-pin spark plugs you can benefit from the latest Bosch spark plug technology. The innovative high-performance spark plugs are tailored to the specific requirements profile of highly charged direct gasoline injection engines: Supercharged engines have an increased ignition voltage requirement, which can primarily be reduced through the use of spark plugs with a small electrode gap. However, a small electrode gap generates major quenching losses, causing poor ignition. To compensate for this, Bosch developed pin-to-pin spark plugs. They are equipped with two particularly thin precious metal electrodes with minor quenching losses. They therefore guarantee high power transmission and reliable ignition.

# Leading in Every Direction: First-Class Results with First-Class Bosch Technology



Bosch spark plugs are in a league of their own. They are a cut above the rest both in original equipment in Europe as well as in motorsport. This is no coincidence – Bosch provides optimal technical solutions for any engine.

## First Choice for Original Equipment

The level of knowledge and expertise at Bosch in the gasoline injection and ignition sectors is virtually unrivaled. Bosch works in close collaboration with vehicle manufacturers to develop each spark plug for original equipment – tailored perfectly to the requirements of each engine. This guarantees the highest level of reliability and state-of-the-art technology – exactly what automobile and motorcycle manufacturers and their customers want.

## Bosch spark plugs in original equipment

- ▶ Alfa Romeo
- ▶ Audi
- ▶ Bajaj Auto
- ▶ BMW
- ▶ BYD
- ▶ Changan
- ▶ Chery
- ▶ Chevrolet
- ▶ Chrysler
- ▶ Citroën
- ▶ Daewoo
- ▶ Fiat
- ▶ Ford
- ▶ Geely
- ▶ Haima
- ▶ Holden
- ▶ Honda
- ▶ JAC
- ▶ KTM
- ▶ Lamborghini
- ▶ Maruti
- ▶ Suzuki
- ▶ Mercedes-Benz
- ▶ Mini
- ▶ Mitsubishi
- ▶ Opel
- ▶ Peugeot
- ▶ Piaggio
- ▶ Porsche
- ▶ Renault
- ▶ Seat
- ▶ Skoda
- ▶ Smart
- ▶ SsangYong
- ▶ Suzuki
- ▶ Tata
- ▶ Vauxhall
- ▶ Volkswagen
- ▶ Volvo
- ▶ Weichai



## From Motorsport to Series Production

Spark plug innovations specially developed for motorsport are incorporated into spark plug production for regular vehicles. In fact they are often perfected furthermore before going into series production for workshops and dealerships.

# Not only Optimum for Cars: Spark Plugs for Special Engines



You can rely completely on Bosch spark plugs. Bosch spark plugs are the number one choice not only for series production cars, but also for motorcycles and low-power engines as well as in industrial applications. They meet the same high quality requirements as the Bosch spark plugs for cars, and ensure that everything runs smoothly wherever they are installed. Choose Bosch spark plugs – your customers will thank you for it.

## Reliability for Motorcycles

Even at low engine speeds, the spark plug in a motorcycle or scooter must be warm enough to avoid carbon fouling. On the other hand, at high engine speeds they must not become too hot to avoid auto-ignition. Bosch spark plugs handle these challenges reliably and always ignite the fuel-air-mixture in the engine's combustion chamber dependably and at the right time. Bikers not only benefit from a safe cold start and very smooth running, but also from low fuel consumption thanks to optimal combustion.

## Low-Power Engines for the Green Sector

Increasingly, both professionals and hobby gardeners are using motorized gardening devices, implying there is growing demand for reliable spark plugs for these low-power engines. The Bosch spark plug range covers a wide array of devices with just a few spark plug models. Bosch spark plugs impress with their original equipment quality and fully satisfy the professional requirements of hobby gardeners: outstanding starting performance, safe ignition, effective protection from corrosion and thread seizure.



## Industrial Applications

The innovative Bosch spark plugs are increasingly being used in industrial applications, for example in combined heat and power plants that are operated by natural gas, landfill or bio gas. Bosch Double-Iridium spark plugs have proven their strengths and exceptional quality in many applications that require secure and low-emission ignition with a long service life.

# Bosch: The Ideal Business Partner for the Workshop of the Future

For over 125 years, Bosch innovations have been keeping vehicles on the road and getting people to and from their destinations while improving safety and peace of mind along the way.

Bosch Automotive Aftermarket offers workshops and retailers a comprehensive portfolio of products that is unmatched worldwide:

- ▶ Efficient diagnostics
- ▶ Innovative workshop equipment
- ▶ Quick, reliable delivery
- ▶ The world's most comprehensive range of spare parts – including both new and remanufactured parts
- ▶ Workshop concepts to meet every requirement
- ▶ Comprehensive training
- ▶ Targeted sales and marketing support
- ▶ A competent service hotline
- ▶ 24-hour online workshop services
- ▶ Affordable leasing services for workshop equipment and software
- ▶ Plus many more services to help you succeed

This combination ensures the perfect coordination of parts, schedules and organization with the corresponding excellent results.

Your address for genuine Bosch quality:

For more information visit:  
[www.bosch.com](http://www.bosch.com)



## The Bosch world:

- ▶ Diagnostics
- ▶ Diesel systems
- ▶ Gasoline systems
- ▶ Braking systems
- ▶ Spark plugs
- ▶ Power systems
- ▶ Batteries
- ▶ Filters
- ▶ Wiper systems
- ▶ Lighting technology
- ▶ Convenience electronics
- ▶ Technical hotline
- ▶ Knowledge database
- ▶ Service training
- ▶ Workshop concepts

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