Product Spotlight April 2022

Bosch Spark Plugs Platinum & Iridium

Designed for maximum performance requirements

The Spark plug has a name that is world renowned: Bosch. Not only did Robert Bosch innovate ignition with a patent for a high-voltage magneto ignition device in combination with a spark plug in 1902, the company that bears his name has continued to stay ahead of the engine technology curve.

Precious Metal Electrodes

Modern engines operate at particularly high combustion chamber temperatures. This also places a strain on the Spark plugs and 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.

High performance Spark plugs

- Aligned and welded ground electrode for optimum ignition.
- Extremely fine precious metal center electrode welded using CW laser welding process.
- Newly developed design of the insulator nose.
- Special ceramic material with high dielectric strength.
- Optimized insulator design.

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

Advantages (continued)

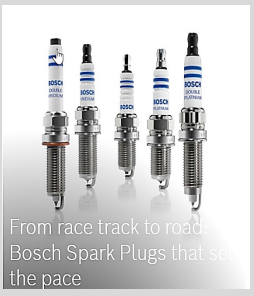
- Perfect dispersion of flame front on all sides .
- Ideally suited to gas operation due to long service life.
- Reduced ignition voltage, optimal for turbocharged engines.
- Very smooth running and superior engine elasticity.
- Engine and catalytic converter protection.

Bosch Spark plugs in Motorsport

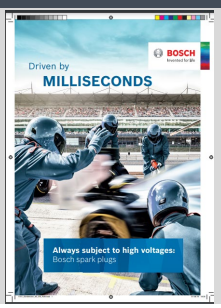
Bosch Spark plugs have been in use ever since car and motorcycle racing started. The widespread and extremely successful application of Bosch Spark plugs in international motorsports does not only prove the high performance and reliability of these Spark plugs, it also serves as “rolling test lab in quick motion”.

Available marketing material

Website communication



Online brochure



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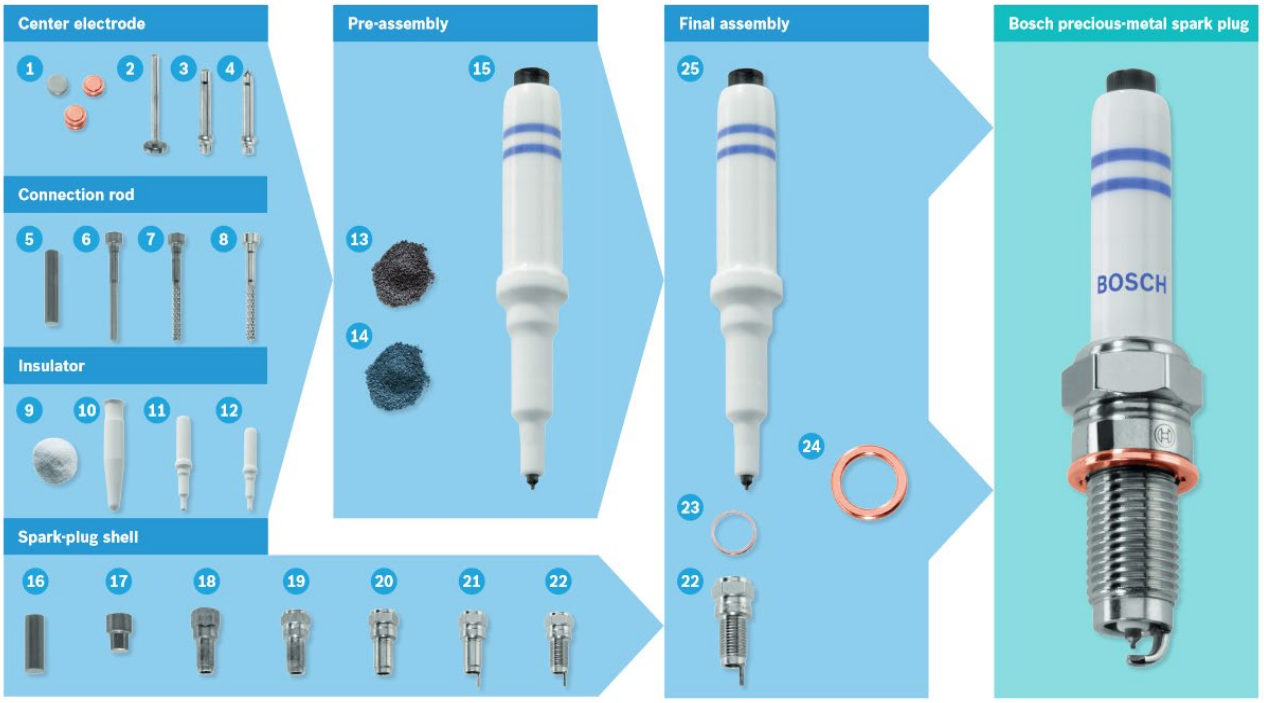


Center electrode

1. Welding copper and nickel-yttrium tablets to circular blank
2. Impact extrusion in 4 steps – step 1
3. Impact extrusion in 4 steps – step 4
4. Welding the pin made from precious-metal alloy (iridium or platinum) to the center electrode using the Continuous Wave laser welding process patented by Bosch

Insulator

9. Ceramic granulate
10. Casting insulator
11. Grinding insulator
12. Sintering insulator

Spark-plug shell

16. Cutting from wire
17. Impact extrusion in 5 steps – step 1
18. Impact extrusion in 5 steps – step 5
19. Latheing and washing shell
20. Nickel plating
21. Welding on the ground electrode and the pad made from platinum alloy
22. Rolling thread and embossing shell

Cup terminal

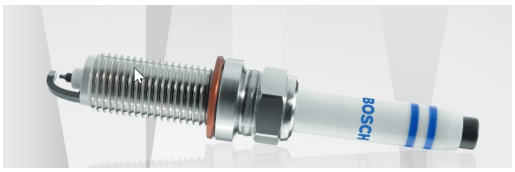
5. Cutting connection rod from wire
6. Impact extrusion in 4 steps – step 4
7. Rolling thread and curling
8. Nickel plating

Pre-assembly

13. Contact glass seal (powder)
14. Resistor glass seal (powder)
15. Imprinting, glazing insulator, mounting center electrode, filling in contact and resistor glass seal powder, mounting connection rod, annealing

Final assembly

23. Internal sealing washer
24. Solid sealing washer for spark plugs with aligned and welded ground electrode
25. Mounting internal sealing washer and insulator into shell, cold crimping, hot crimping, cutting and bending center electrode, adjusting electrode gap, mounting external sealing washer



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