AMSOIL®

The First in Synthetics®

NGK® SPARK PLUGS

NGK SPARK PLUGS AND PLUG WIRES

World Leader in OEM and Aftermarket Spark Plugs Offers Superior Spark Plug and Plug Wire Performance.

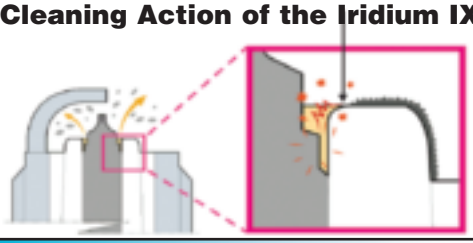
Product Description

NGK uses top-quality raw materials to design and manufacture spark plugs for automotive and powersports applications. AMSOIL offers four lines of NGK spark plugs: Iridium IX, V-Power, Standard and Commercial.

NGK Iridium IX

NGK Iridium IX spark plugs provide unsurpassed performance in auto/light truck and powersports applications. The iridium alloy electrode is extremely durable to heat, corrosion and electrical wear. The fine wire electrode reduces the amount of energy required to create a spark while providing increased ignition efficiency and superior ignitability. The center electrode of the Iridium IX spark plugs has an extra anti-fouling mechanism. A thermo edge between the center electrode and the insulator nose provides a gap for a secondary micro-discharge to jump and initiate a self-cleaning process.

Secondary Micro-Discharge & Self-Cleaning Action of the Iridium IX



NGK V-Power

NGK V-Power spark plugs offer higher performance in auto/light truck applications than the standard plug. The V-Power electrode lowers ignition system voltage requirements. It provides better protection against fouling, greater ignitability and improved performance over conventional spark plugs.

NGK Standard

NGK Standard spark plugs provide excellent service for many applications including auto/light truck, powersports and small engines. They feature a triple gasket sealing process that virtually eliminates gas leakage past the shell. Other manufacturers use a one- or two-step sealing process. NGK Standard spark plugs' insulators are made from 99% pure alumina silicate, allowing for longer insulator noses for reduced fouling. NGK Standard plugs feature a solid copper core that provides superior heat dissipation and conductivity. Their resistors are produced with a glass and carbon mixture which is fired to ensure superior performance and durability. Some manufacturers use inserts that break. NGK Standard plugs also have corrugated ribs to prevent flash over and cold rolled threads to prevent damage to the cylinder head.

NGK Commercial

NGK Commercial series spark plugs are specifically designed for commercial and other small engine applications, including lawn equipment, trimmers, pumps and generators. Their easy starting, anti-fouling design helps deliver longer life in heavy-duty and commercial applications.

NGK Spark Plug Wire Sets

NGK spark plug wire sets are manufactured with the finest materials for excellent noise suppression and superior conductivity. They offer exact OEM fit, form and function and the quality of their construction is unsurpassed.

NGK plug wires use a stainless steel terminal with three serrated crimps, the competition uses a galvanized steel terminal with only one crimp. NGK plug wires have a stainless steel "C" clip with a corrosion resistant chromate retainer, providing improved durability and ensuring a lasting connection.

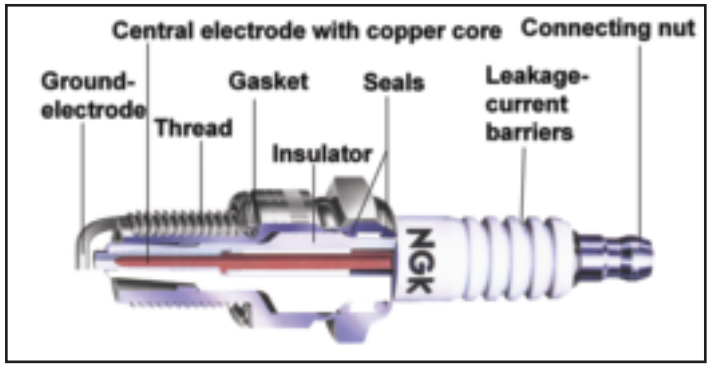
NGK wire sets incorporate EPDM rubber or silicone jacket material. These two materials have the highest temperature ratings and insulation properties. They also use high-temperature silicone adhesive to bond the boots to the wire, preventing moisture intrusion and securing the components together.

Power Cable Wire Sets

NGK Power Cables are performance spark plug wires designed with ultra-low resistance for high-performance applications. They are a perfect complement to the Iridium IX spark plugs. Their silicone jacket minimizes voltage leak and is resistant to heat and chemical corrosion. Reduced voltage loss means improved acceleration, smoother idling and cleaner fuel burning.

Anatomy of a Spark Plug

The spark plug serves as a lighter to ignite the air/fuel moisture in an engine's combustion chamber. Spark plug components include a ground electrode, central electrode with copper core, threads, gasket, insulator, seals, leakage-current barriers and a connecting nut (see diagram).

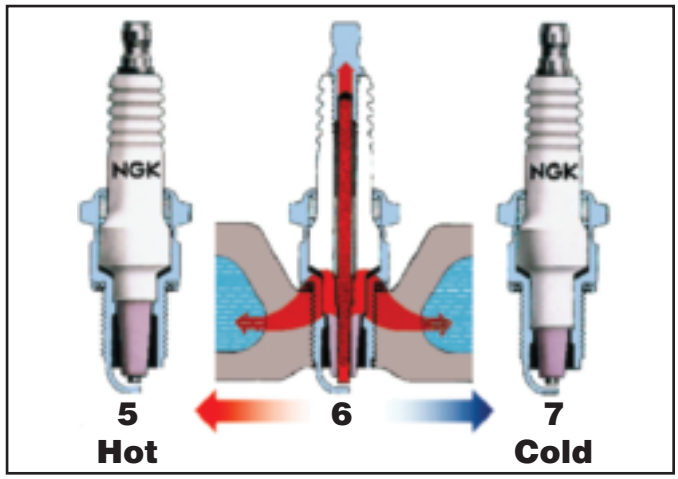


Why NGK Spark Plugs are Superior

NGK spark plugs are designed to extract maximum performance from the engine throughout its heat range. The center electrode, made of copper, is deeply inserted in the tip to quickly dissipate large amounts of heat. NGK spark plugs incorporate an insulator made of state-of-the-art alumina ceramics for superior insulation and thermal conductivity to dissipate heat and resist thermal shock while providing superior mechanical strength.

Heat Ratings

A spark plug must dissipate the heat produced by the combustion process. The heat rating is a measure of the amount of heat dissipation the plug is able to provide. A hot plug has a long insulator nose, while a cold plug has a short insulator nose. It is essential to use a spark plug with the proper heat range. OEMs recommend the best plug for stock applications.



WHY CHANGE SPARK PLUGS AND PLUG WIRES?

Spark Plugs

Spark plugs and plug wires require regular maintenance to ensure engines will continue to provide peak performance. Spark plugs wear out over time, becoming worn or dirty and simply losing their spark. As the number of misfires per mile goes up, exhaust emissions are increased and gas and power are wasted.

New plugs maintain peak engine performance and efficiency. They improve cold starting and reduce the voltage requirements on the vehicle's ignition system, decreasing the chance of misfire and leaving more amps for the starter and injectors. New spark plugs also minimize the risk of catalytic converter failure, something that is costly to replace. One misfiring spark plug has the ability to dump enough raw fuel into the exhaust to overheat and damage the converter.

Periodic spark plug replacement is a necessary part of routine maintenance. Recommended spark plug change intervals vary according to the type and age of the vehicle. For instance, a 1984 Oldsmobile would probably require plug replacement every 25,000 to 30,000 miles, while a 2007 Chevy Malibu would need replacement every 100,000 miles. Powersports applications vary greatly, in most applications spark plugs are changed every year.

Plug Wires

The repeated heating and cooling combined with the vibrations in the engine compartment and the constant high voltage flowing through spark plug wires can create an irregular spark. This is remedied by changing the plug wires.

Good plug wires are essential for reliable ignition performance and trouble-free operation. Bad plug wires cause hard starting, poor fuel economy, rough idle, hesitation when accelerating and increased emissions.

Most vehicle manufacturers do not recommend a specific change interval for plug wires, however wires should be changed when performance and fuel economy decrease. Other signs signifying a need for new plug wires include any obvious damage to the insulation, loose plug boots or terminals or visible arcing.

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.