

# **NGK IRIDIUM IX®**

NGK IRIDIUM IX® spark plugs are tested to the highest original equipment standards, providing the performance and service upgrade a vehicle deserves.

Used at the tip of the center electrode of the spark plug, Iridium is a denser metal alloy, 6x that of platinum; this provides increased service life, improved ignitability and throttle response. Available in colder heat ranges, NGK Iridium IX® is perfect for modified and high performance engines.



# The NGK Difference

#### High-grade alumina silicate ceramic

Creates a stronger insulator to reduce dielectric punch-through (caused by spark exiting through side of ceramic)

#### Cold-rolled threads

Prevents cross-threading

#### 98% pure copper core

Increased heat dissipation for

### **Trivalent** metal plating

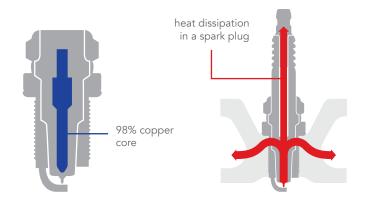
#### **Tapered-cut** ground electrode

Higher ignitability, reduced quenching (see Illustration B, back)





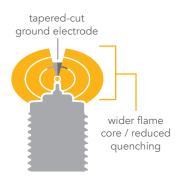




#### **INCREASED HEAT DISSIPATION**

Illustration A

The combination of NGK's high-grade pure alumina ceramic and 98% pure copper core enables the spark plug to quickly dissipate large amounts of heat. This ultra-wide heat range prevents spark plug overheating while providing reliable starts.



#### **HIGHER IGNITABILITY**

Illustration E

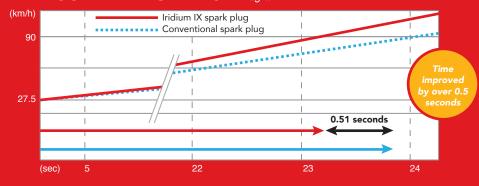
**The quenching effect** is where the cooler center and ground electrodes drain the energy of the flame core by way of heat transfer. If quenching is severe, the flame core can be extinguished, causing ignition to fail. NGK Iridium IX® are designed to reduce the quenching effect resulting in better ignition performance.

## **TESTING & MANUFACTURING**

All NGK spark plugs must pass extensive testing procedures and quality checks to ensure fit and performance.

- Combustion pressure testing to maintain stable performance (Diagram 1)
- Acceleration testing for improved acceleration performance (Diagram 2)
- Mechanical vibration testing
- Thermal shock testing to -40°F
- Tightest resistor manufacturing process in the industry
- Manufacturing in our ISO 11565 certified manufacturing facility
- Gap measurement with laser precision throughout production process
- Center electrodes are accurately positioned with 360° welding process

#### **ACCELERATION TEST** Diagram 2



## COMBUSTION PRESSURE TEST Diagram 1

