

## **V-POWER®**

V-Power® spark plugs are named for their specially designed v-groove center electrode to improve ignitability. Tested to the highest original equipment standards, these plugs are crucial for vehicle maintenance.



# 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 and damage to cylinder heads

### 98% pure copper core

Increased heat dissipation for reliable starts, prevents spark plug overheating (see Illustration A)

### Trivalent plating

No anti-seize required

#### 90° V-Groove center electrode

Allows the spark to occur closer to the outside of both the center and ground electrodes for better flame expansion; reduces quenching and improves ignitability (see Illustration B)



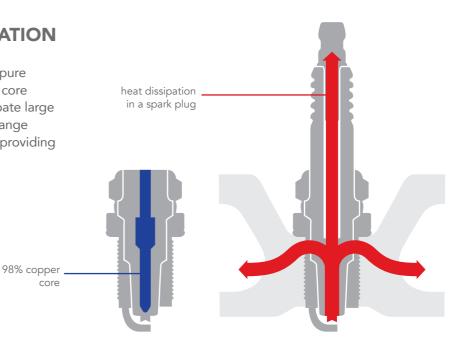


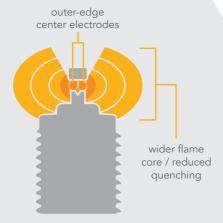


### **INCREASED HEAT DISSIPATION**

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 B

**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 V-Power® spark plugs 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.

- 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



