

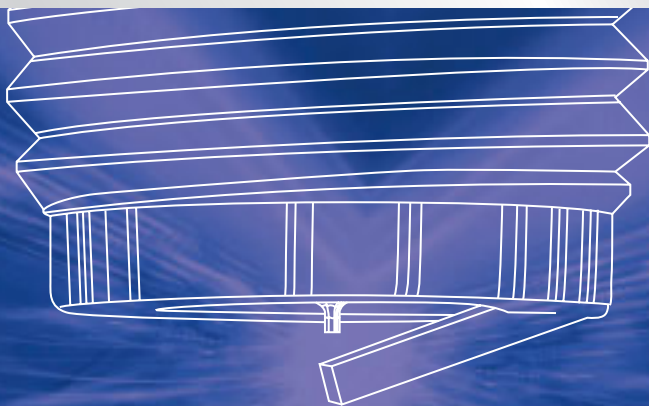
High Performance Spark Plug

IRIDIUM RACING®

0.4mm Iridium, only at DENSO!



The world's finest diameter (as of May 2006)
0.4mm
with an iridium center electrode



Unbeatable spark technology fine-tuned for racing



Specifications Include Terminal

Included with the plug comes with a terminal nut compatible to the Nology Hot Wire and most plug cords around the world. Please remove for vehicle types that do not require terminals. (Some plugs have solid terminals. Please refer to the list.)



Built-in, Highly Reliable Resistor

All IRIIDIUM RACING plugs specify a resistor, and contain a highly reliable monolithic-type resistor that blocks noise that may affect electronic devices. (IW06 has no resistor.)



Highly Corrosion Resistant, Burnished Nickel Plating

Burnished nickel plating on the housing, a high level of corrosion resistance has been realized. Also, because the amount on the threads is low, the damage to the female thread in the cylinder is reduced.



0.4 mm Diameter Ultra-Fine Iridium Center Electrode

The center electrode tip is able to be made fine using a new iridium alloy with a high melting point. The required voltage is reduced, and ignitability is improved greatly. This new iridium alloy's material composition, manufacturing method^{*1}, and welding method^{*2} have been patented.

*1. The addition of rhodium to improve high temperature oxidation resistance: Japan Patent 2877035, UK Patent 2302367, People's Republic of China Patent 961022841, Republic of Korea Patent 0292083, U.S.A. Patent 6094000/6262522
*2. Using a melting method instead of the conventional sintering method. Japan Patent 3000955, U.S.A. Patent 5977695

1 All-platinum Ground Electrode

Compared to the nickel alloy used in conventional spark plugs, the high melting point of platinum will reduce such problems as ground electrode melting and wear. Also, the 0.8mm platinum alloy is welded on and gapped without any bending, reducing residual stress and increasing durability.

2 Insulators for Racing

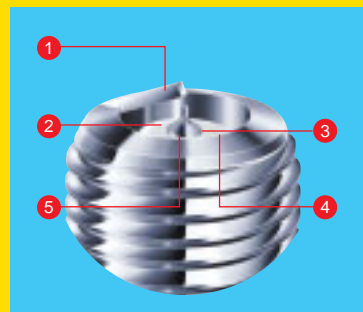
By using a new, strengthened insulator which was developed during numerous and repeated testing during racing trials, strength is improved by 20%.

3 Spark Cleaning Pocket

Between the center electrode and the insulator, a small pocket has been opened around the tip clearance. When there is carbon fouling or deposition, this part will discharge and burn off the carbon, restoring electrical resistance. This technology is patented by DENSO (Japan Patent No. 2727558).

4 Silicone Oil Coating

During the start of the race, non-starting from carbon fouling and carbon deposits can be fatal. To stop this, the insulator has been coated with a silicone coating. Using the water repellency of silicone, the insulator surface is isolated from moisture and carbon, preventing a decrease in resistance.



5 360° Laser Welding

The process used to join the iridium tip is a highly reliable "All-around Laser Welding"^{*1} process that is able to withstand various kinds of driving conditions.



*1. This "360° Laser Welding" method has been patented in the U.S.A. and Japan (Japan Patent No.: 2921524, U.S.A. Patent No.: 6078129)