

# Comparison Between Genuine DENSO and Fake Spark Plugs

## Comparison of DENSO and Fake

### Appearance



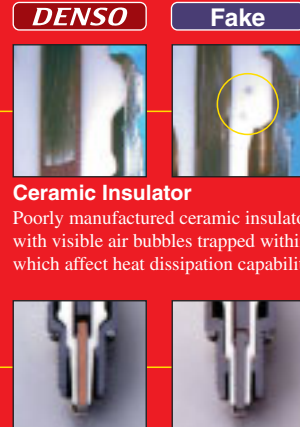
**Terminal**  
Terminal has a glossy finish.

**Markings**  
Printed wording can be scraped off.

**Housing**  
Poor surface finish.

**Screws & Electrode**  
Poor thread quality and finish.

### Section



**Ceramic Insulator**  
Poorly manufactured ceramic insulator with visible air bubbles trapped within which affect heat dissipation capability.

**Center Electrode**  
A genuine DENSO spark plug has a copper-core center electrode with excellent heat conductivity. A fake DENSO spark plug does not, retaining heat that causes meltdown.

## Problems Caused by Fake Spark Plugs

### Problem 1

Fuel economy is diminished.



Inconsistent sparking causes incomplete combustion. Unburned fuel forms a black sooty deposit on the spark plug, eventually leading to poor fuel economy and poor start up of the engine.

### Problem 2

Engine power drops on uphill roads and highways.



Poor heat dissipation due to the lack of a copper-core center electrode causes pre-ignition. As a result, engine power drops under highway driving or uphill driving conditions.

### Problem 3

The plug melts down.

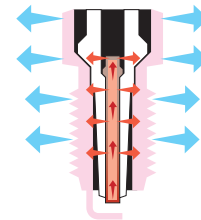
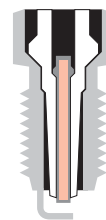


Continued usage of an overheated plug will damage the electrodes.

## Why Power Drops and Melting Occurs

### DENSO

DENSO plug contains copper core

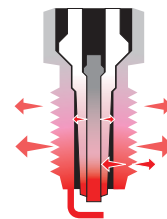
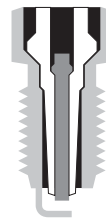


**Quick heat dissipation.**

Copper is an excellent heat conductor. High temperature heat is quickly dissipated away from the center-electrode to prevent melt down.

### Fake

Fake plug is iron only



**Slow heat dissipation.**

Absence of a copper-core center electrode results in poor heat dissipation capability. Prolonged use causes power loss due to excessive heat buildup. This results in melt down of the ground electrode, eventually leading to serious engine damage.



(See below)