

**Application:** 1997–2019

## **INSTRUCTION SHEET**

#### Part Number



# Tech Tips – Spark Plug Wires



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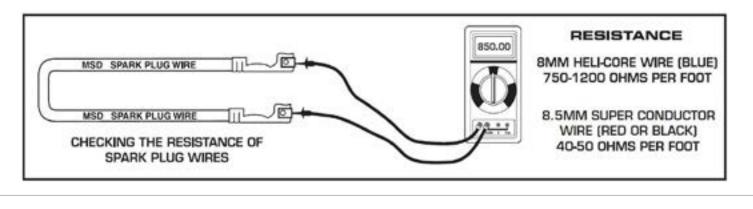
Spark Plug Wires have 2 main objectives: transfer the spark energy to the plugs and suppress the Electro Magnetic Interference (EMI) that the spark voltage projects. Too high of resistance decreases the spark energy, yet too low of resistance may generate too much EMI noise which will interfere with the operation of other electronics on the vehicle. A good quality wire, proper routing and routine inspection are all important in getting the most performance out of your ignition system.

MSD offers 2 great spark plug wires: Heli-Core Wire (red or black) and the 8.5mm Super Conductor Wire (blue). The Heli-Core Wires are a performance wire upgrade for any car or truck. For serious performance, the 8.5mm Super Conductor Wire is the wire of choice. Both sets of wires feature a conductor that is helically wound around a special center core that is designed to suppress, or choke, EMI. Helically wound, sometimes called spiral core, must be used with an MSD Ignition Control. Solid core wires do not suppress EMI so there could be interference with the ignition or other electronics on the vehicle.

The Super Conductor Wire has less than 50 ohms per foot, the lowest available in helically wound wire. A special copper-alloy conductor is wrapped very tightly around a ferro-magnetic impregnated center core which gives the wire extremely high EMI suppression. This design ensures that optimum spark energy will reach the spark plugs while EMI noise is held at a minimum.

NOTE: Solid Core spark plug wires cannot be used with any MSD Ignition controls or Pro Mags.

Just like tires, oil, or spark plugs, the spark plug wires are a maintenance item. Service of the wires hinges on your application and ignition control. If you have a 6AL Ignition and use the care as a daily driver, the wires will last for thousands of miles. Conversely, if you are racing a high compression engine with nitrous and an MSD 10, the wires should be inspected and even replaced during the race season. When checking wires, closely inspect for signs of burning or arc-through. Look at the boots for signs of cracking or burning and using an ohm meter to check resistance of each wire is a good idea. Also, keep in mind that the coil wire is delivering 8 times the spark so it should be checked closely. When checking resistance of the wires, note that the longer wires will have more total resistance, but their values should average out. If one wire stands out among the others, it should be replaced.







## Description (cont.)

### 8.5MM SUPER CONDUCTOR SPARK PLUG WIRES

- Extremely low resistance for improved spark delivery
- High suppression capability to block out EMI
- Strongest terminal crimps and connections
- Durable, high temp outer sleeve and boots

The 8.5mm Super Conductor wire is the best wire you can run on your engine whether it's a cruiser, sport compact, or all-out race car. With less than 50 ohms per foot resistance, you can ensure that the most spark energy possible reaches the spark plug gap. More spark energy means improved combustion resulting in increased performance.

Even with it's low resistance, the Super Conductor Wire suppresses Electro Magnetic Interference (EMI) like a high resistance factory wire. By tightly winding the copper conductor around a specially designed center core, a highly effective EMI choke is created.

If that weren't enough, the 8.5mm outer sleeve is a combination of silicone and synthetic materials to give the wire supreme resistance against heat, chemicals, and abrasion. Also, special dual crimp terminals are used that grasp both the sleeve and the conductor producing the strongest crimp available.

The 8.5mm Super Conductor is used on 300+ mph Top Fuel Dragsters, Sprint Cars, and everything in between.

