

# Racing / High Performance Spark Plug: Heat Range Facts

Typically, engines which are stock or are only slightly modified, can use the original equipment (OE) recommended spark plug.

**Racing Modified Engines** – Generally, any engine modification that alters the overall compression ratio of the engine will involve spark plug selection issues. One thing to consider is heat range.

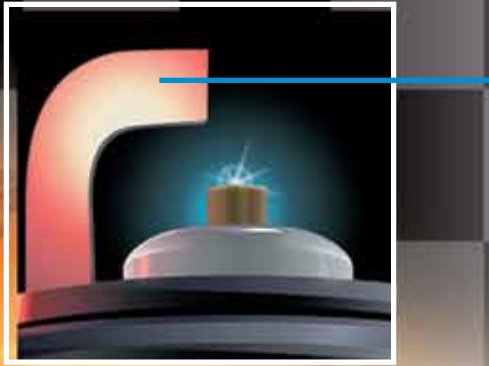
The heat range of the spark plug determines how much heat the spark plug is capable of removing from the combustion chamber. The heat range of the spark plug does not increase or decrease horsepower. It changes the temperature of the tip of the spark plug. If the heat range is too cold, the deposits will not burn off the tip and the spark plug will foul. If the spark plug heat range is too hot, pre-ignition can occur.

A switch in heat range of the spark plug will change the temperature of the spark plug tip by 70-120 degrees.

If you are unsure of the correct heat range to use, always start with a colder spark plug. If the plug is too cold, the plug will eventually foul and a misfire will occur. This will not hurt the engine. Unfortunately, though, if a spark plug that is too hot is inadvertently chosen, pre-ignition and detonation can severely damage your engine. Don't go to a hotter heat range unless you've consulted your engine experts.

As there are many different ways to modify your engine for racing applications, we can't tell you here which specific spark plug to use.

**FRAM Group is not responsible for engine damage resulting from improper spark plug selection due to engine modifications or racing.**



- **Cut Back Ground Electrode**
- **Anti-Corrosive Nickel Plating**
- **Large Ground Electrode for better heat transfer**

