

## **O2 Sensor modification using Spark Plug non-foulers**

Purpose: Non-foulers act as spacer to recede the O2 sensor probe out and away from the exhaust gases. By doing this, there will be less detectable oxygen at the sensor tricking the fuel computer into thinking it is more rich than it actually is. This manipulates the voltage from the O2 sensor going to the fuel computer to cause the injectors to pump less fuel leaning out the air:fuel mixture. This results in a reduction in fuel consumption.

If this is used by itself, it is possible to cause pinging, detonation, excess heat, etc... since the mixture may become too lean. It is recommended to only use this modification if you are using some type of fuel combustion enhancer that will actually allow a slightly leaner mixture to fully combust effectively such as various fuel additives like RXP or enhanced spark plugs like the Pulstar Plugs, water fuel “hydrogen booster” add-ons and other modification.

Please visit <http://www.energeticforum.com/renewable-energy> for more info.

This document is simply a documentation of one attempt at using this modification and no claims or guarantees are made. If you do this modification and destroy your engine, you are accepting full responsibility.

Actual discussion thread for this modification can be found here:  
<http://www.energeticforum.com/renewable-energy/1387-o2-sensor-modification-using-spark-plug-non-foulers.html#post12597>

# O2 Sensor - Spark Plug non-Fouler modification to lean engine

**WARNING: DO AT YOUR OWN RISK  
YOU ACCEPT ALL RESPONSIBILITY**



Buy spark plug anti-foulers  
2 per package  
example part number circled  
Drill 1/2" hole  
in one of them



Buy anti-seize lubricant to provide good seal and to prevent cross threading



Example of O2 Sensor after removed from exhaust manifold



Used anti-seize lubricant on sensor threads and screwed it into non-fouler that has been drilled out



Used anti-seize lubricant on threads of first non-fouler and screwd on 2nd non-modified non-fouler



Used anti-seize lubricant on 2nd non-fouler threads and screwed into manifold using 1 of the gasket washers  
this is the only gasket washer I used

## TIPS:

Use a drill press to drill the hole this one was done by holding the anti-fouler in a vice and using a hand drill with a 1/2" bit it works but may be slightly off center.

You may want to install 1 fouler at a time to see the results but I did 2 at the same time and will report results

Thanks Redmeanie for bringing this to our attention  
Thanks Racer426 for showing us how to do this ourselves