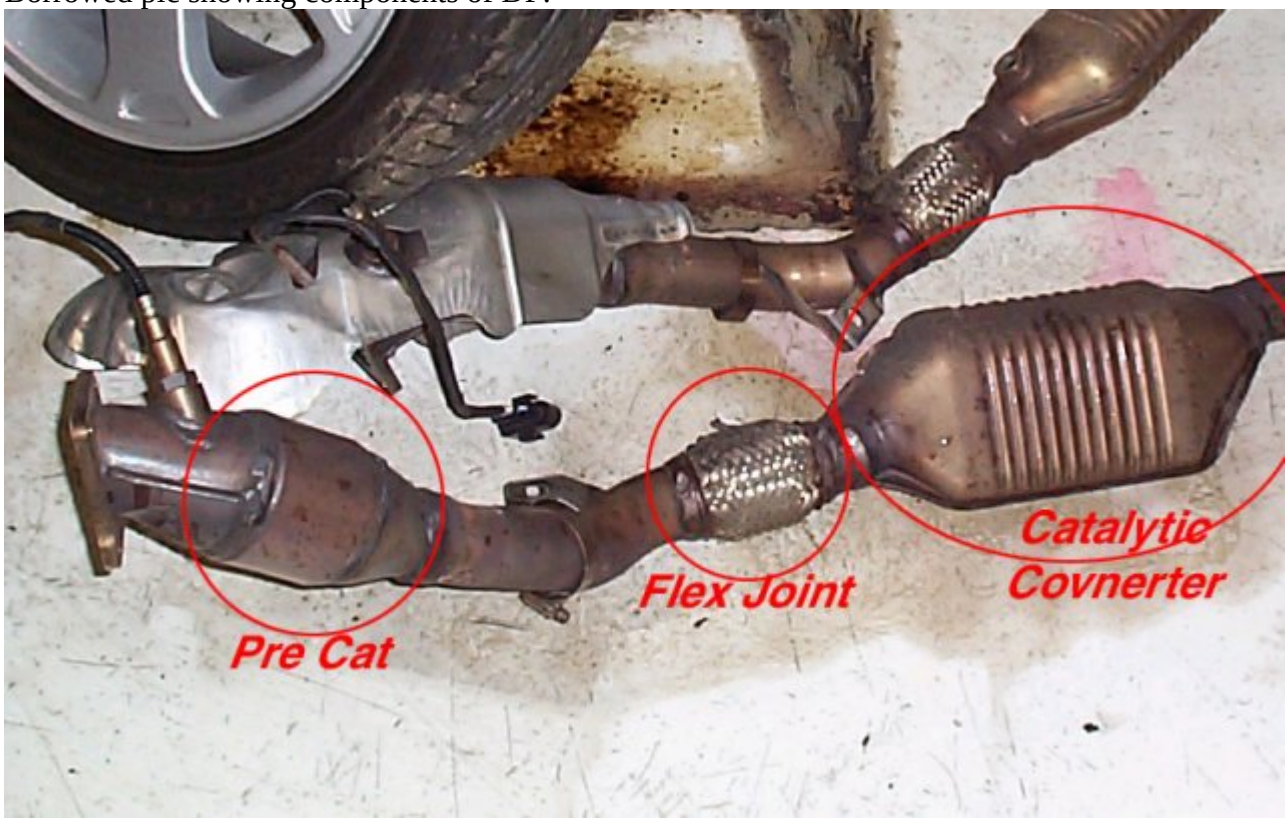
piggie pipes no longer require welding

Posted by: RMcQ on 2006-04-19 18:19:42
Account #: 2021

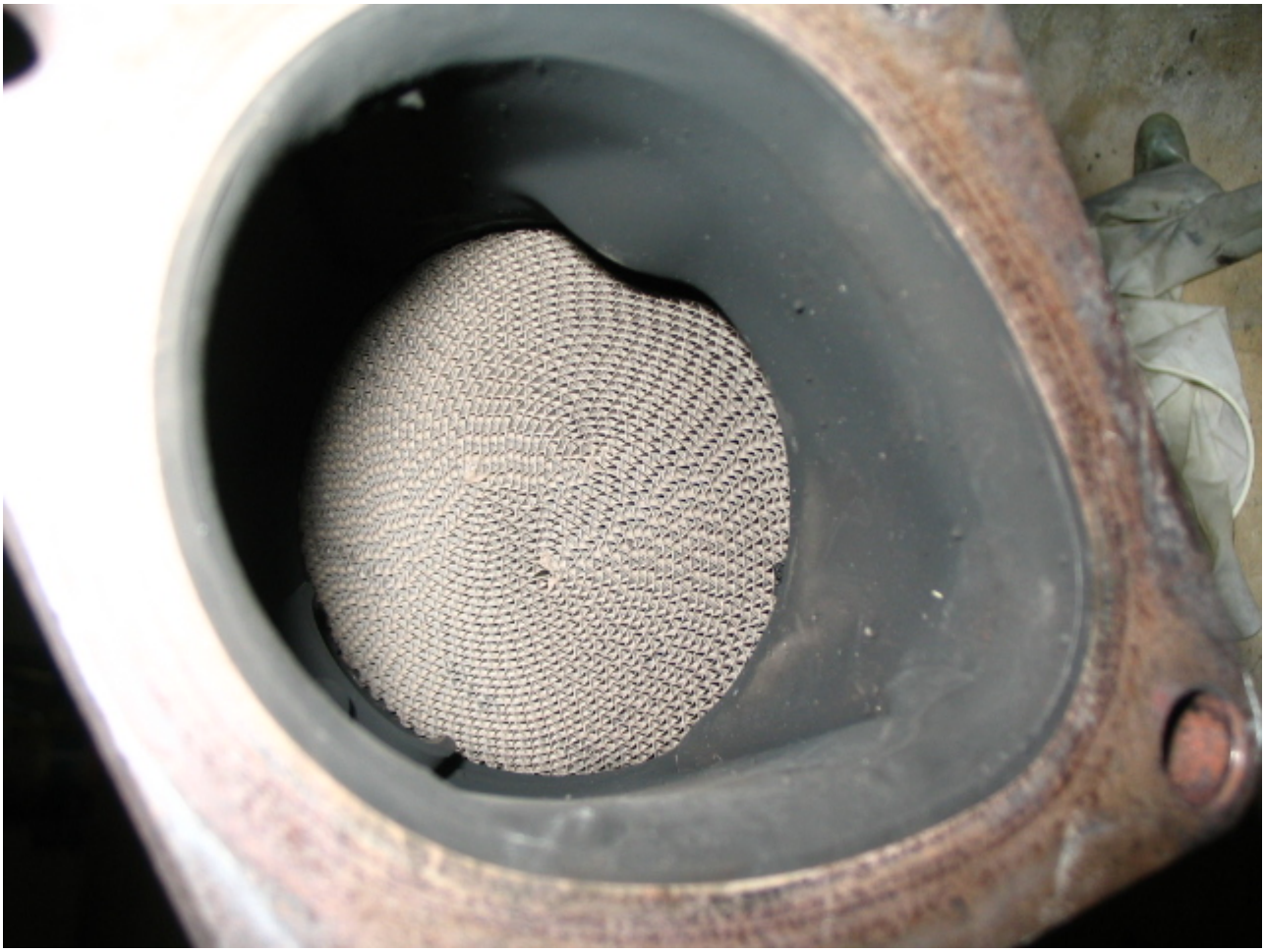
The idea with modifying stock down pipes is to gut the pre-cats for improved flow and performance. This is a low cost DIY mod if you are willing to invest the labor. Getting the pipes out of the car involves 4 bolts on the turbos, 2 o2 sensors, one hanger bracket bolt, and the exhaust clamps beyond the main cats. It doesn't sound like much, but it is a good bit of labor to get it all out.

When the down pipe (DP) is out of the car this is what you have (note: the first 3 pics are not mine)

Borrowed pic showing components of DP:'



When you look down into the stock DP, this is what you see. The mesh is of course the catalytic material. Think this affects flow much being only a couple inches from the turbine wheel?

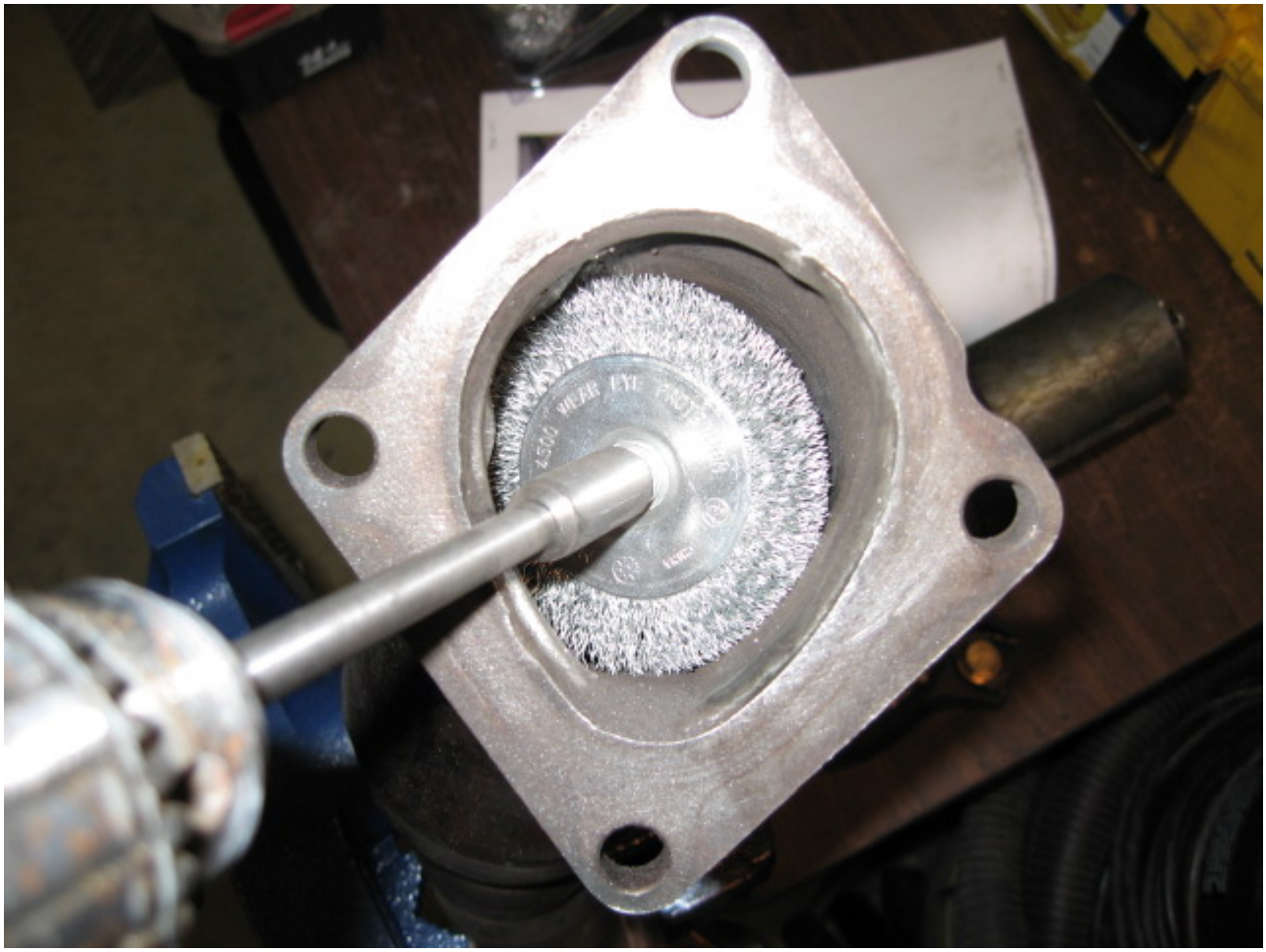


The "harvesting" strategy involves basically bashing the material out. I used a combination of cold chisels, pry bars, long drills, and long neck pliers. This stuff puts up a good fight. Eye and breathing protection mandatory.

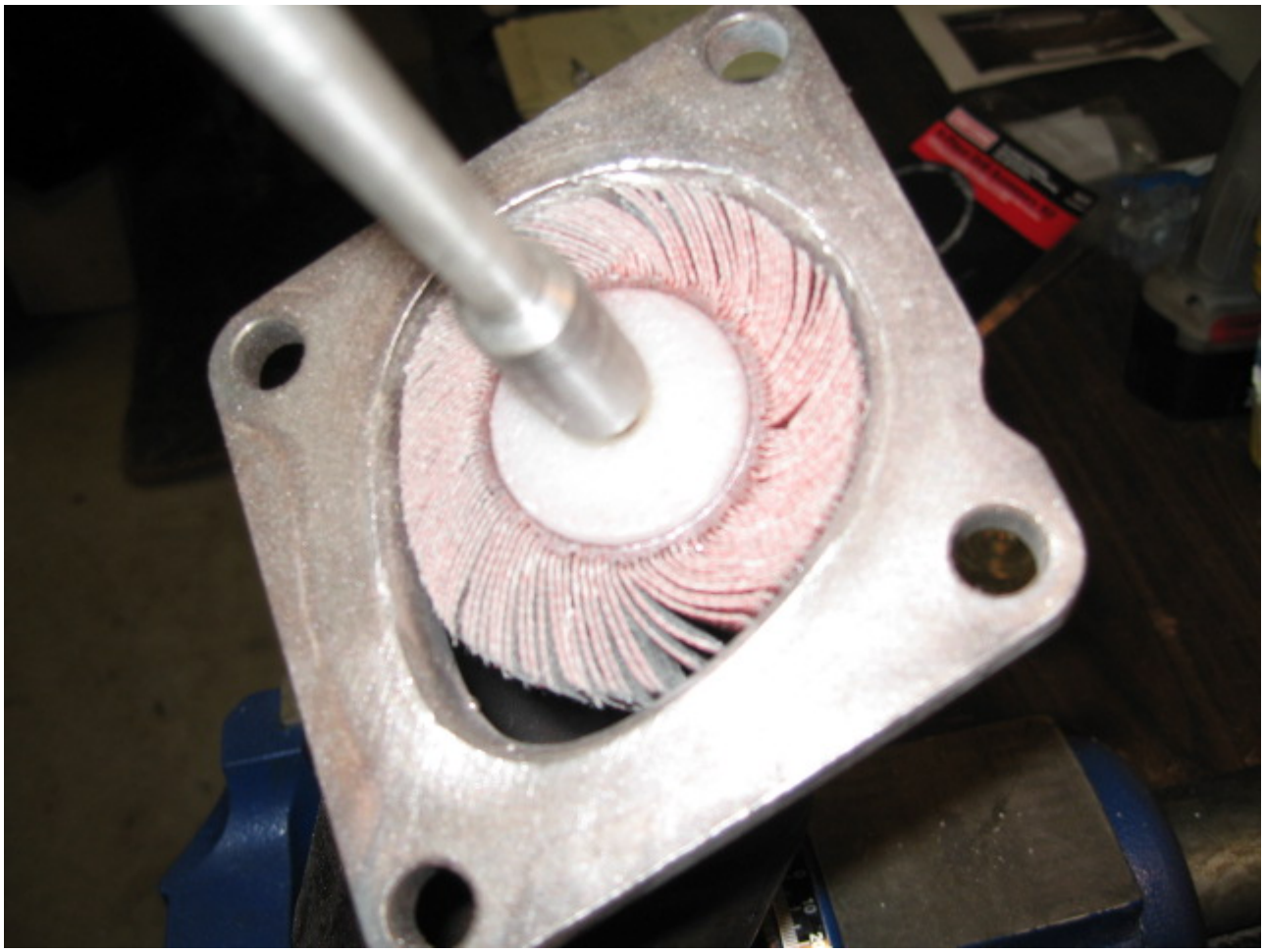
So once I got them gutted I had to clean them up a bit. I used a wire wheel and a flapper wheel. They looked so nice afterward (as if I am a machine shop or something. ha!)

DP with ick:

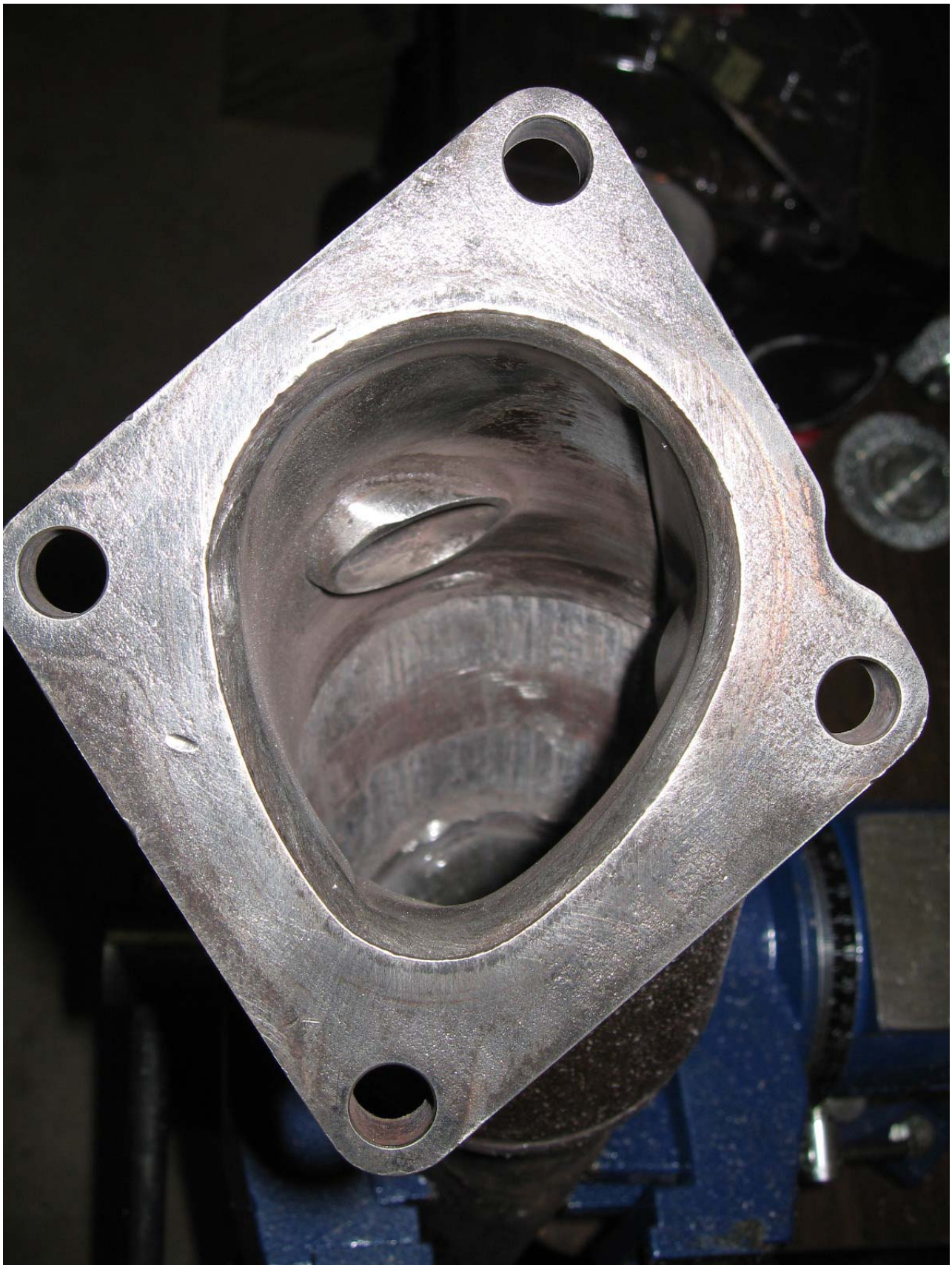
Tool 1:



Tool 2:



Ready for reinstallation:



So I got them back on the hovercraft (car is still on jack stands awaiting return of front half shafts from Raxles.) and was able to start it but not drive it. Full report will have to wait. I was hoping that opening them up will bring a *little* more life to my Milltek exhaust, but couldn't tell at idle or with small throttle blips.

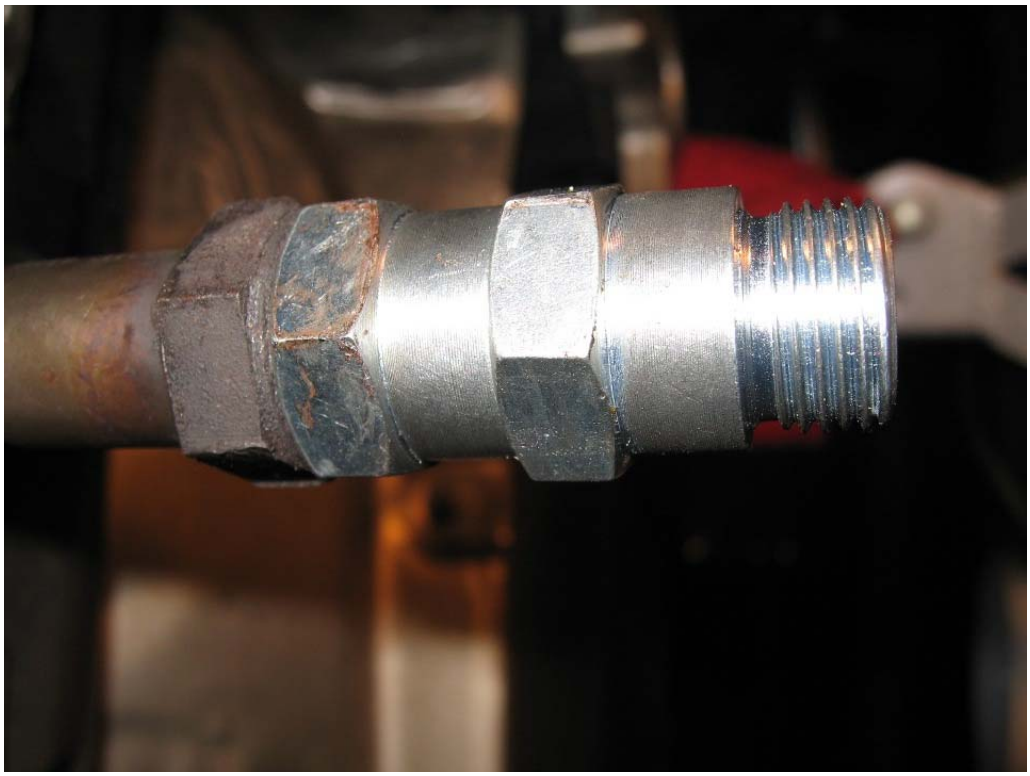
Rather than relocate the secondary O2 sensor behind the main cat I decided to try the cheap and easy method recently developed by the S4 guys.

You can trick the secondary O2 sensor into thinking everything is OK by using spark plug anti-foulers. They are available at Pep-Boys or whatever. They are "Help" brand part #42009. Total cost to me for 2 packages was $10.49.

You have to stack two to make it work. The first one has to be drilled out to 19/32" which is the size of the O2 sensor body:

The O2 sensor goes into the drilled anti-fouler

Then the combo goes into a second unmodified anti-fouler and this of course gets screwed back into the original location on the DP.



I have not driven it yet, but on start and idle it passed readiness quickly.