

To: Smith Analytical Clients
Subj: Emissions Master Manifold Upgrade
Date: May 1, 2024

Smith Analytical has released the manifold upgrade for the Emissions Master. This manifold is a direct replacement for the existing manifold which currently houses the thermocouple and zirconia O2 sensor. The new manifold houses the thermocouple, O2 sensor and the ignitor which is being relocated from the top of the combustion chamber to the new manifold assembly. Relocating the ignitor will make it less likely for it to seize in the NPT connection at the current location. Details below.

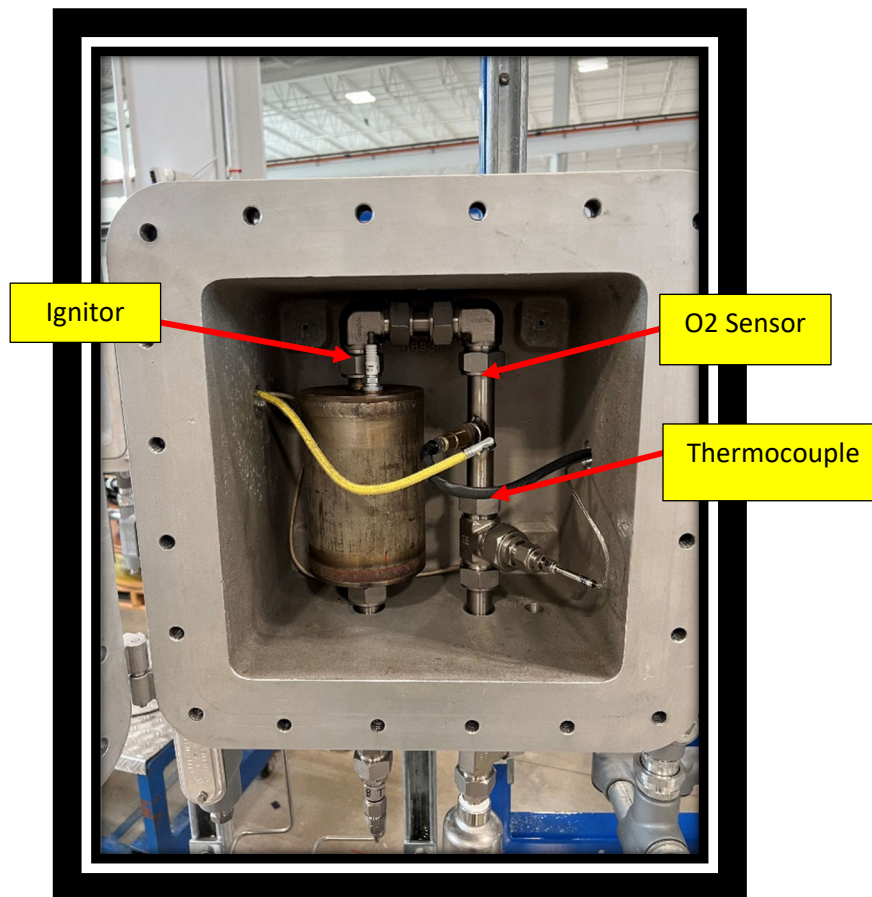


FIGURE 1 – CURRENT MANIFOLD ASSEMBLY

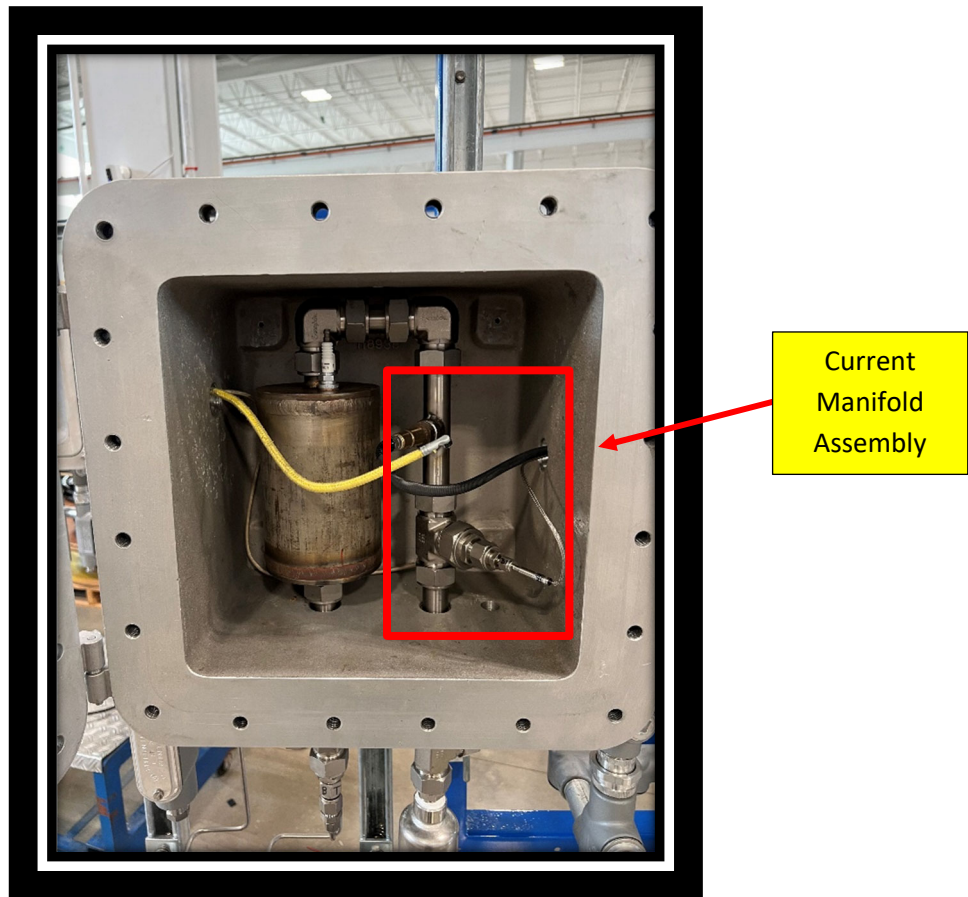
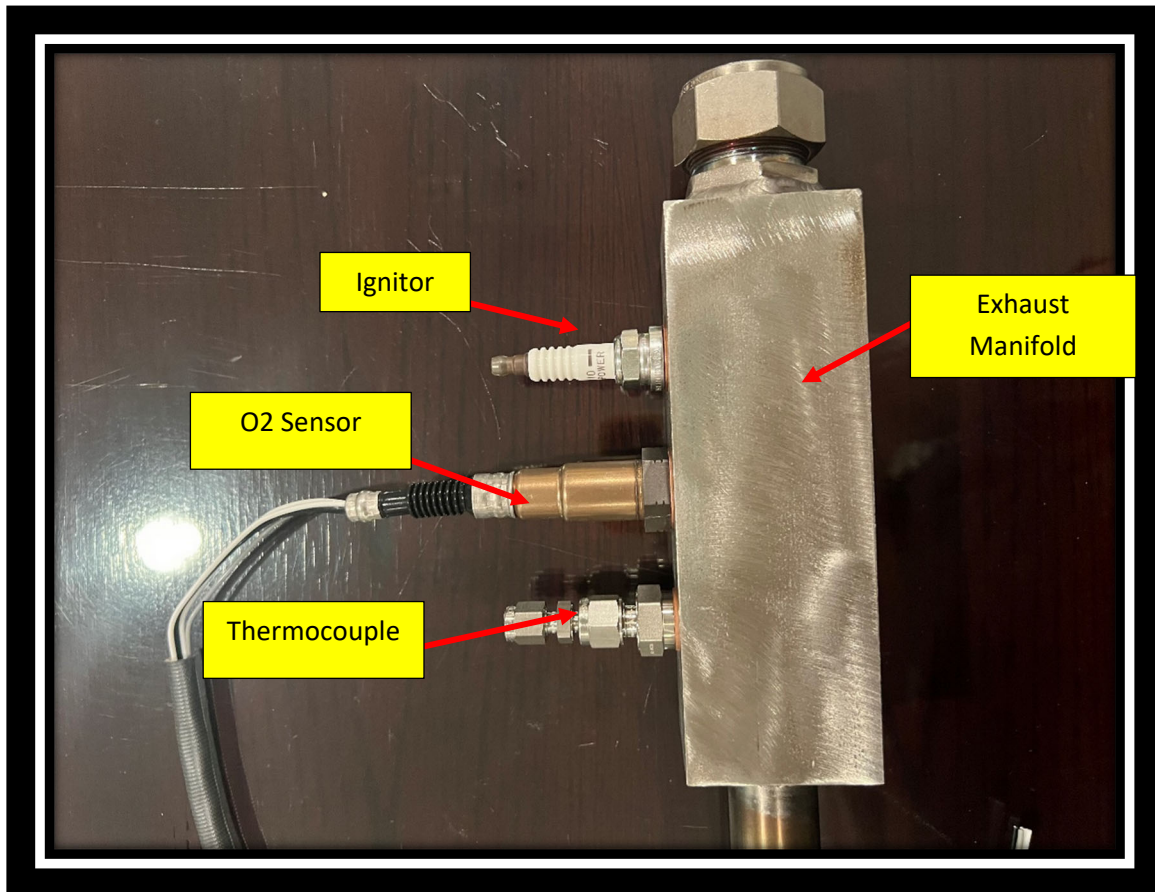
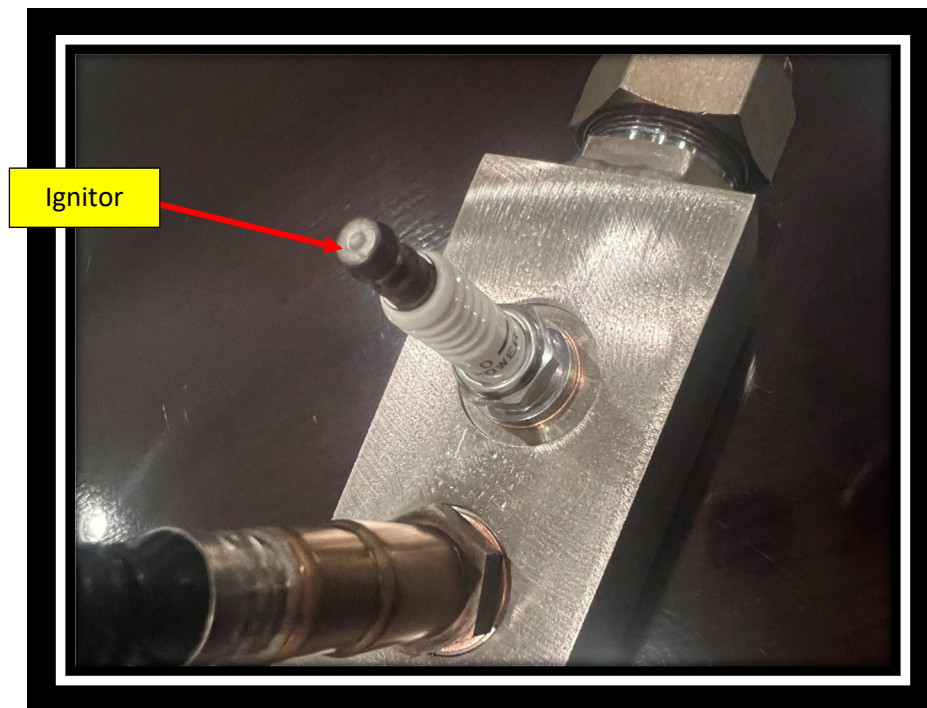


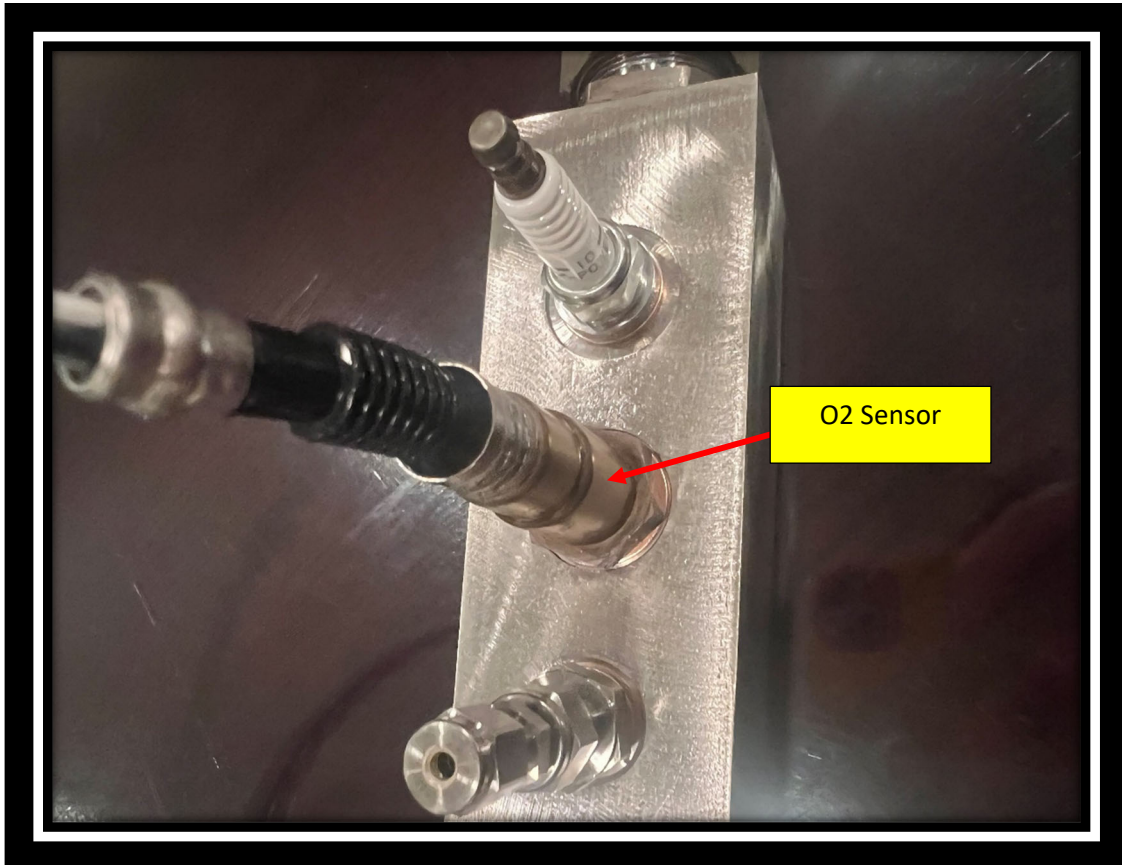
FIGURE 2 – NEW MANIFOLD REPLACES CURRENT MANIFOLD ASSEMBLY



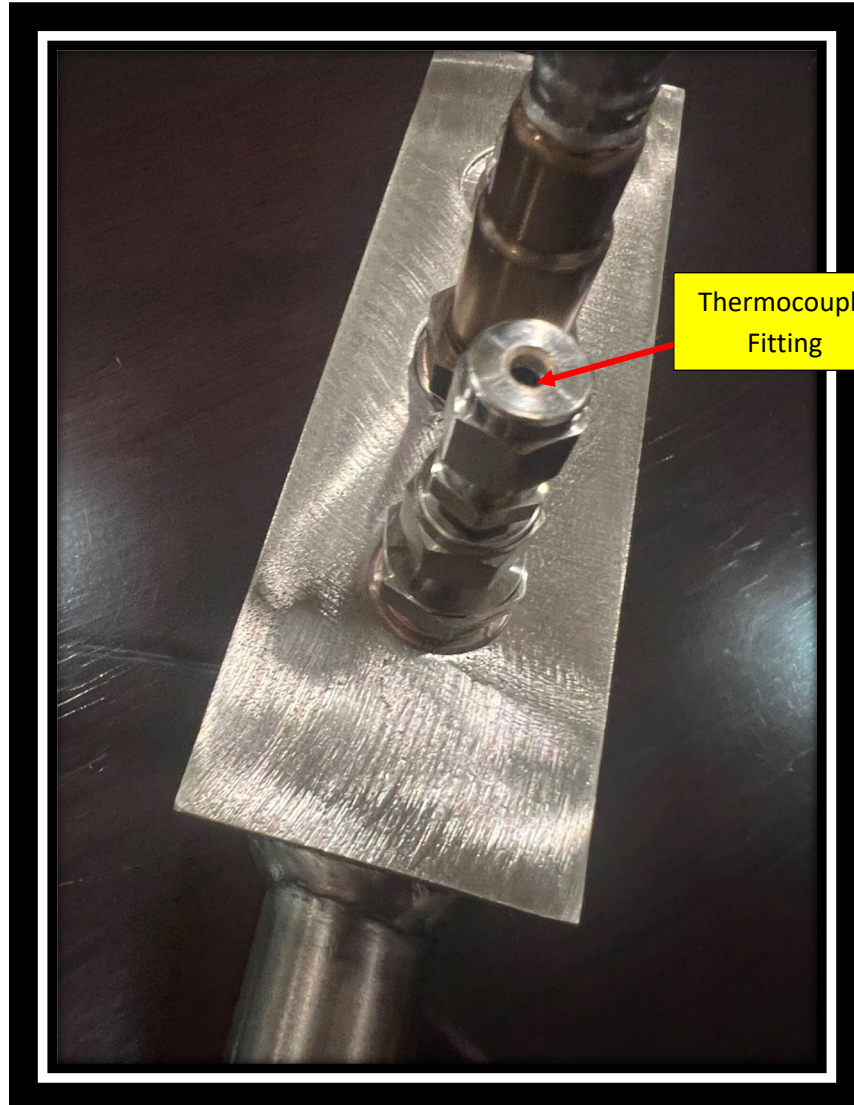
**FIGURE 2 – NEW EMISSIONS MASTER MANIFOLD ASSEMBLY
PART NUMBER – EM-MAS-0**



**FIGURE 3 – NEW EMISSIONS MASTER MANIFOLD ASSEMBLY
PART NUMBER – EM-MAS-0**



**FIGURE 4– NEW EMISSIONS MASTER MANIFOLD ASSEMBLY
PART NUMBER – EM-MAS-0**



**FIGURE 5– NEW EMISSIONS MASTER MANIFOLD ASSEMBLY
PART NUMBER – EM-MAS-0**