



Diesel Regulation: Opening A Window of Opportunity

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A new time is being ushered in for diesels. Somehow they have escaped much of the scrutiny experienced by their gasoline counter parts for years but all that is changing and changing fast.

The Environmental Protection Agency's clean Diesel regulations became effective in 2007 and are being phased in through this year and beyond. In this and future articles we will attempt to answer some basic questions as to how these regulations will affect the industry from the OEM and Aftermarket manufactures to the technician in the field.

Diesel engines offer good fuel economy, power and durability and while the operational advantages are clear, they emit large amounts of Nitrogen Oxides (NOx), Particulate Matter (PM), and other toxic air pollutants. The changes we are seeing mirror those we went through with gasoline engines in recent years. Engines are being designed to run cleaner, after treatment devices are being added or upgraded, Diesel fuels are more closely regulated and many states are enhancing their emission testing programs to include light to medium duty Diesels.

Cleaner IN means Cleaner OUT. By optimizing the engines for efficient combustion, manufactures are taking the necessary first steps to cleaner Diesel technology. The Engine Management System, which includes the PCM and all the sensors and actuators, is designed to get the most out of every drop of fuel. Much the same as its gasoline counterpart.

The regulations concerning Diesel fuel have become stricter and include lowering of its sulfur content. Ultra Low Sulfur Diesel (ULSD) fuel has a sulfur content of 15ppm (parts per million) compared to 500ppm for Low Sulfur. This new standard, (ULSD) was proposed by the EPA for On-road vehicles starting in 2006 and was mandated for use in all 2007 and newer vehicles with advanced emission control systems.

After treatment devices include components like Diesel Particulate Filters (DPF), Diesel Oxidation Catalysts (DOC), and Selective Catalyst Reduction (SCR). There are almost as many different configurations as there are vehicle manufactures and the service and maintenance of these components should become profitable. Like everything else there is a learning curve and investing time in educating technicians will prove to be a wise decision. A manufacture can choose from not only multiple components but also multiple processes to achieve their goal. We will address these various systems in the coming months.

Select states have already begun phasing-in light and medium duty Diesels to their Inspection and Maintenance (I/M) Programs. Generally those states that are testing or plan to test these vehicles are looking at three areas of concern: (1) Visual check of all emission components with an emphasis on tampering. (2) OBD II check including MIL, Codes, Monitors, etc. (3) A visible smoke test checking for lingering excessive smoke which contains large amounts of Particulate Matter. Testing procedures may differ from state to state. States known to have or are planning to implement Diesel I/M Programs are CA, NJ, NY NV and CO. Check with your local EPA office for details.

Magnaflow's Diesel Performance Products are extremely popular with truck enthusiasts and making sure our systems perform and are compatible with the other components on the vehicle is our priority.

Cleaning up the environment...one converter at a time

Gary

