

A Complete Lineup of Engines

In addition to our diesel offerings, our gas engine alternative is part of a complete lineup unmatched in the industry. Gas engines provide a realistic solution to lower mileage users who appreciate the availability of fuel at every gas station.

No matter which solution you choose, you can be confident that your Chevy or GMC truck will offer the highest level of performance now and in the years to come:

Chevy Silverado and GMC Sierra pickup trucks with Vortec V8 and V6 gas engines, and Duramax diesel engines

Chevy Express and GMC Savana vans with Vortec V8 and V6 gas engines, and Duramax diesel engines

Chevy Kodiak and GMC TopKick medium-duty trucks with Duramax 6.6L, Isuzu 6H, CAT C7 diesel and Vortec 8.1L gas engines

W-Series medium-duty trucks with Isuzu 4H diesel and Vortec™ 6.0L gas engines

T-Series medium-duty trucks with Isuzu 6H diesel engines



2007 Diesel Emission Standards

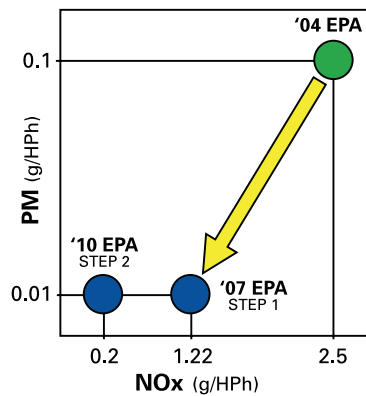
OUR PROVEN SOLUTION

The 2007 Emissions Standards Challenge

Starting January 1, 2007, all new diesel engines must comply with regulations that require the reduction of nitrogen oxide (NOx) and hydrocarbons (HC) by more than 50% and particulate matter (PM) by 90% beyond the current 2004 emission standards. Further reductions of NOx and HC will be required by 2010.

Emissions must be reduced in all types of operation, including stop-and-go situations. All diesel engine manufacturers will have to meet these stringent emissions standards. The result: additional hardware, software and ultimately, higher costs.

2007 Emissions Requirements



The GM Solution:

Utilizing our resources worldwide and working with our diesel engine partners Isuzu™ Motors Ltd. and Caterpillar®, GM is proud to meet the

SOME OF OUR 2007 EMISSIONS TECHNOLOGY HAS BEEN PROVEN IN OVER 60,000 ISUZU TRUCKS OPERATING SUCCESSFULLY IN JAPAN FOR THE LAST TWO YEARS.

will deliver optimum performance at the lowest possible cost of ownership. In fact, some of our

upcoming 2007 Diesel Emissions Standards. Our technology solutions fulfill our customers' needs as well as the EPA's new clean air requirements. You can be confident that GM trucks with 2007-compliant Duramax™ 6.6L and Isuzu 4H and 6H diesel engines

2007 emissions technology has been proven in over 60,000 Isuzu trucks operating successfully in Japan for the last two years.

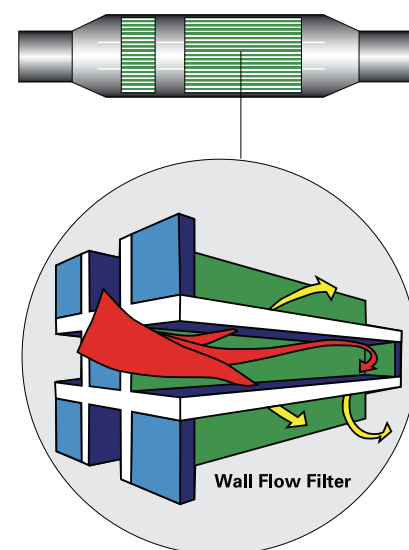
Exhaust Gas Recirculation (EGR)

To provide and maintain the best engine performance and fuel economy while reducing the nitrogen oxide levels for the 2007 emissions requirements, our engines will use an advanced Exhaust Gas Recirculation (EGR) system and a variable geometry turbocharger.

Diesel Particulate Filter (DPF)

To reduce particulate matter, a Diesel Particulate Filter (DPF) captures soot and larger sulfate particles in a series of ceramic honeycomb channels. Exhaust gases are directed into a cordierite or silicon carbide molded substrate with closed ends. Gas passes through the porous material, and the particulates are trapped and accumulate on the channel walls. An Oxidizing Catalyst will control the hydrocarbons.

Filter Assembly (Conceptual)



DPF Regeneration

To prevent the DPF from clogging, the trapped particulates are burned off and the filter is cleaned with a high temperature (around 1000°F in the Particulate Filter) regeneration process that leaves a harmless ash residue.

There are two types of regeneration: 1) Self-regeneration, which is automatic when the exhaust gases are high enough; and 2) Forced regeneration, which is either automatic or manual. In most instances, the regeneration will happen automatically as the truck is driven throughout the day, without involvement by the driver. However, on medium-duty trucks, if vehicle operation does not produce exhaust gases hot enough for automatic regeneration, a control light will indicate the need for regeneration and the driver may initiate the process by activating a switch on the dashboard.

Regeneration requires managing and controlling much hotter exhaust gases than those experienced on current diesel-powered vehicles. By utilizing dual-wall air gap pipes, insulated catalysts and DPF filters, we are able to retain the heat within the exhaust system. Consequently, pipe and component exterior skin temperatures are comparable during regeneration with existing gas engine exhaust systems.

Although the DPF filter is designed for long life, eventually the accumulated ash must be removed by special cleaning equipment at truck dealerships.

To precisely control engine combustion and DPF regeneration, we have developed system sensing and control software. Extensive calibration changes have also been made.

Closed Crankcase System

The 2007 regulations require all diesel engine emissions be reduced, including crankcase gas. As a result, a closed crankcase system will be added that reroutes ventilation gases back into the engine for combustion. Some systems will have serviceable filters to collect residual crankcase oil.

Special Fuels and Lubricants

The EPA has also lowered the limit for diesel fuel sulfur from 500 ppm (parts per million) to 15 ppm. This new "low-sulfur" fuel will be available beginning October 2006 and will add 5¢ to 10¢ per gallon to fuel costs. New low-ash oil will be utilized to extend the maintenance life of the DPF filter. We have designed our emissions systems to work efficiently with these new fuels and lubricants.

GM Is Ready To Meet Your Needs

Working with our engine suppliers, GM has thoroughly tested our emissions technology in the lab and in the field under a wide variety of driving conditions and applications. Trucks utilizing our proven 2007 emissions technology are operating now.

We will continue to deliver products that meet your trucking needs today – and well into the future.



W-Series



T-Series



GMC TopKick



Chevy Express



GMC Sierra