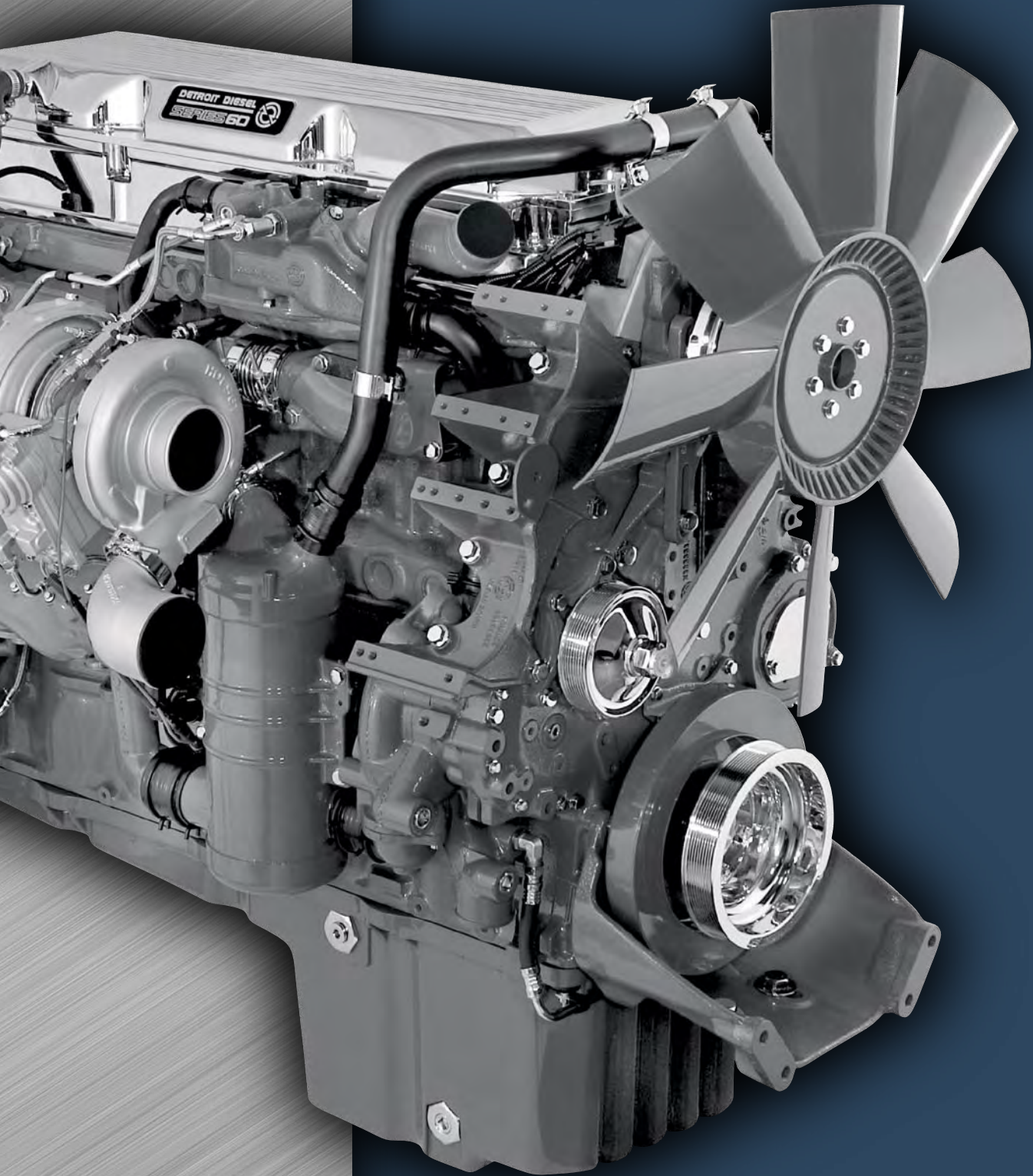




SERIES 60[®]

2007 EMISSIONS

ENGINE



WE'RE DRIVING TECHNOLOGY.

For nearly 70 years, Detroit Diesel has designed, tested and manufactured engines for on-highway applications. Customers choose our engines for reliability, fuel economy, weight advantages and ease of service. These qualities continue to define our 2007 product line. This is the most advanced and environmentally friendly generation of Detroit Diesel engines ever built.

Combining Detroit Diesel's long heritage of innovation with the resources of our parent company, DaimlerChrysler – the world's largest commercial vehicle manufacturer – we've created engines that comply with the Environmental Protection Agency's (EPA) 2007 diesel-emissions standards and also deliver the performance and dependability our customers expect and deserve.

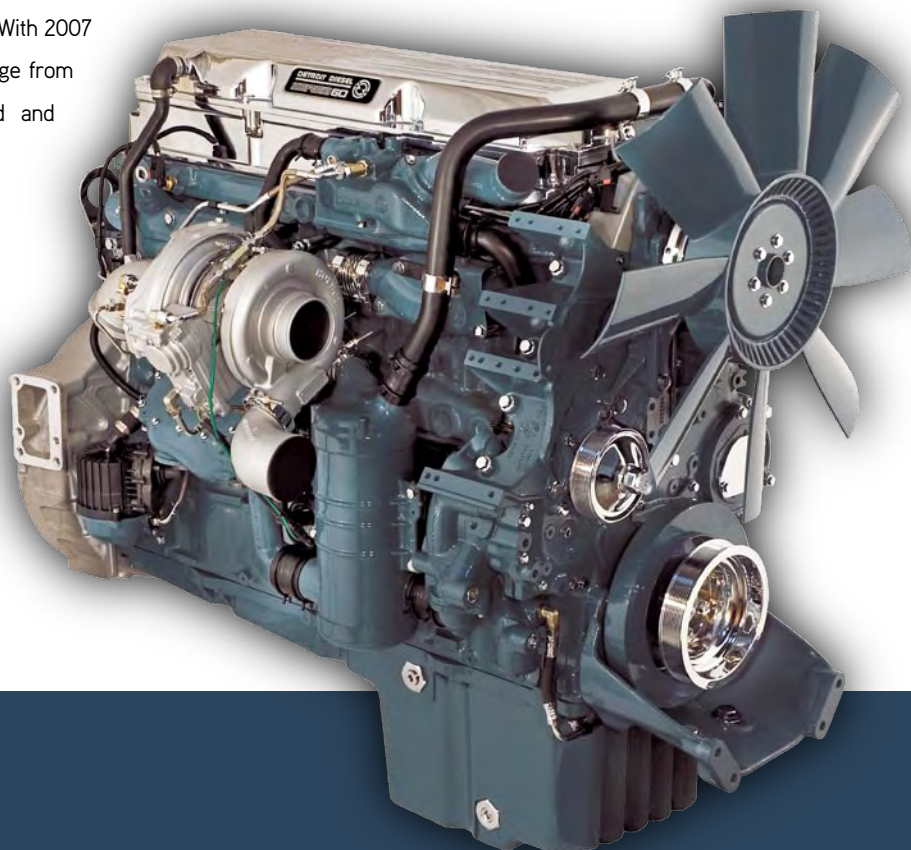
We have invested hundreds of millions of dollars in engineering, testing and manufacturing to ensure that our engines meet the next, and most challenging, round of EPA emissions requirements. By the end of 2006, our 2007 development engines will have endured countless laboratory tests and racked up millions of highway miles, running in a variety of customer applications. With 2007 nearly here, the message from Detroit Diesel is loud and clear: We're ready!

THE 2007 SERIES 60 ENGINE

Since 1992, the Detroit Diesel Series 60® has been North America's most popular heavy-duty on-highway diesel engine. With its excellent fuel economy and highly reliable performance, the Series 60 has become the industry's workhorse. The 2007 version of the Series 60 will continue this tradition while meeting all Federal and California diesel-engine emissions requirements.

TIGHTENING EMISSIONS STANDARDS

The EPA has been reducing diesel emissions for the past 30 years. The latest regulations, which take effect in 2007, demand changes in both fuel and engine technology. The new regulations will dramatically reduce nitrogen oxide (NOx) by 55 percent and particulate matter (soot and ash) by 90 percent. We achieved the first target by optimizing the existing Exhaust Gas Recirculation (EGR) system and the second by adding an Aftertreatment System, comprised of a Diesel Oxidation Catalyst (DOC) and a Diesel Particulate Filter (DPF).



REFINED ENGINE COMPONENTS

EXHAUST GAS RECIRCULATION (EGR)

Exhaust gas recirculation systems have been optimized to dramatically cut NOx formation by routing a measured amount of exhaust flow to the cylinders to lower combustion temperatures. The newly designed system features a high-capacity, tube-and-shell EGR cooler that is more rugged than the previous model.

Because coolant is the system's lifeblood, we enhanced the water pump for greater output, and we changed to a partial-flow stream inside the EGR cooler.

The EGR valve, now located on the cool side of the engine is new as well, at least for the Series 60. Identical to that used on the MBE 4000, it is noteworthy for its demonstrated reliability.

SMART FUEL SYSTEM®

The SMART Fuel System adds to the performance and cleanliness of the 2007 Series 60. Dual solenoid Electronic Unit Injectors provide exact fuel metering and enable independent injection pressure control. This system has multiple injection capability to maintain performance and fuel economy advantages while at the same time improving engine sound quality.

Series 60 Engine Power Ratings

425 HP @ 1,800 RPM	1,450 lb-ft @ 1,200 RPM
445 HP @ 1,800 RPM	1,450 lb-ft @ 1,200 RPM
455 HP @ 1,800 RPM	1,550 lb-ft @ 1,200 RPM
470 HP @ 1,800 RPM	1,650 lb-ft @ 1,200 RPM
490 HP @ 1,800 RPM	1,550 lb-ft @ 1,200 RPM
515 HP @ 1,800 RPM	1,450 lb-ft @ 1,200 RPM
515 HP @ 1,800 RPM	1,550 lb-ft @ 1,200 RPM
515 HP @ 1,800 RPM	1,650 lb-ft @ 1,200 RPM

Series 60 Engine Cruise Power Ratings

425/445 HP @ 1,800 RPM	1,450 lb-ft @ 1,100 RPM
455/490 HP @ 1,800 RPM	1,550 lb-ft @ 1,100 RPM
490/515 HP @ 1,800 RPM	1,550 lb-ft @ 1,100 RPM
470/515 HP @ 1,800 RPM	1,650 lb-ft @ 1,100 RPM

DETROIT DIESEL ELECTRONIC CONTROL (DDEC) VI

The Series 60 set the benchmark as the first fully electronic heavy-duty diesel engine. Now Detroit Diesel raises the bar with the sixth generation DDEC VI engine management system. It employs a more powerful microprocessor, increased memory and enhanced diagnostics. The DDEC VI is capable of monitoring and managing all engine functions including the Aftertreatment Systems required for 2007 emissions. DDEC VI is a key part of the strategy to achieve greater operating efficiency and cleaner exhaust emissions.

ELECTRONIC VARIABLE GEOMETRY TURBOCHARGER (VGT)

Engine performance starts with low-end throttle response. The new Series 60 uses an electronic variable geometry turbocharger that automatically – and precisely – adjusts its boost across the operating range, delivering quick and punchy lift on the low end, where turbo lag would otherwise occur.

CYLINDER KITS

New pistons for the Series 60 are designed to improve combustion and oil control. Designed with enhanced monotherm geometry, the pistons have a new bowl shape and enhanced oil consumption characteristics, combined with a smoother liner bore finish. Together, these elements substantially reduce the amount of make-up oil required between oil changes.

MAINTENANCE-FREE CRANKCASE BREATHER OIL SEPARATOR

This device, a centrifugal oil separator, also helps reduce oil consumption. The spinning separator sends oil droplets back to the sump where they can continue to serve the engine. And the best thing is – there is no maintenance required.

REFINED FUELS AND LUBRICANTS

ULTRA LOW SULFUR DIESEL (ULSD) FUEL AND CJ-4 OIL

The 2007 Series 60 is designed to run on ULSD fuel, which can contain no more than 15 ppm sulfur. The current maximum sulfur content for on-highway diesel fuel is 500 ppm. ULSD fuel is necessary to avoid fouling the engine's Aftertreatment System.

A new low ash oil formulation, designated CJ-4, will be required in EPA-07 engines. CJ-4 oil contains less than 1.0 wt. % sulfated ash. Use of high ash engine oils will reduce the cleaning interval on the Diesel Particulate Filter (DPF) system.

REFINED EXHAUST SYSTEM

EXHAUST AFTERTREATMENT SYSTEM

The biggest change to the 2007 engine is the addition of an exhaust After-treatment System, which replaces the muffler assembly in the exhaust system. The unit's defining components are a Diesel Oxidation Catalyst (DOC) and a Diesel Particulate Filter (DPF) that oxidizes – or burns – soot. During normal highway operation, exhaust temperatures alone are usually high enough to burn off accumulating soot – a process known as “passive regeneration.” In low ambient temperatures, however, or in some stop-and-go applications, the system needs a little help to regenerate, or clean itself. This process is called “active regeneration.”

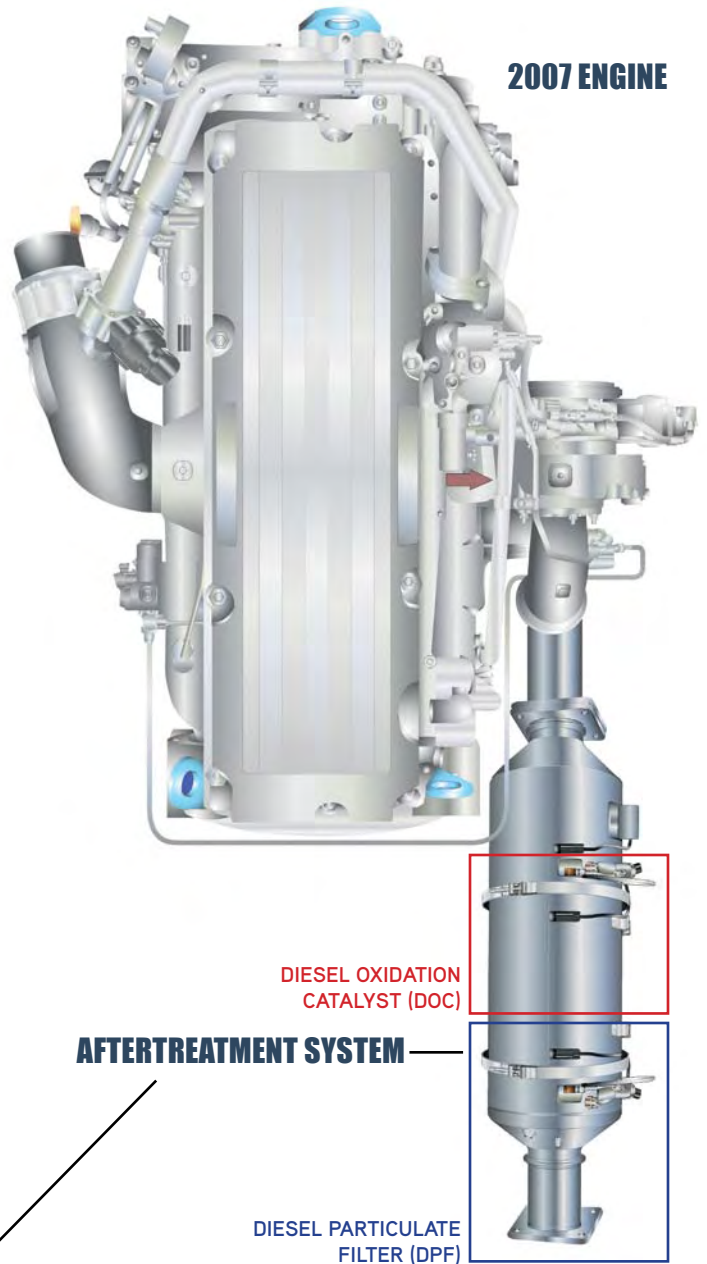
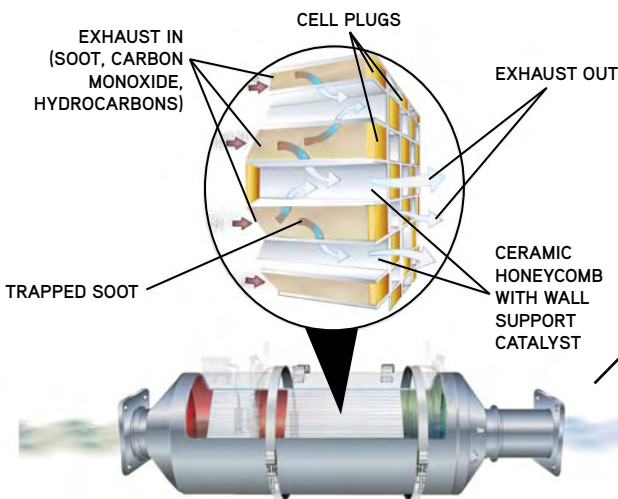
DOSER

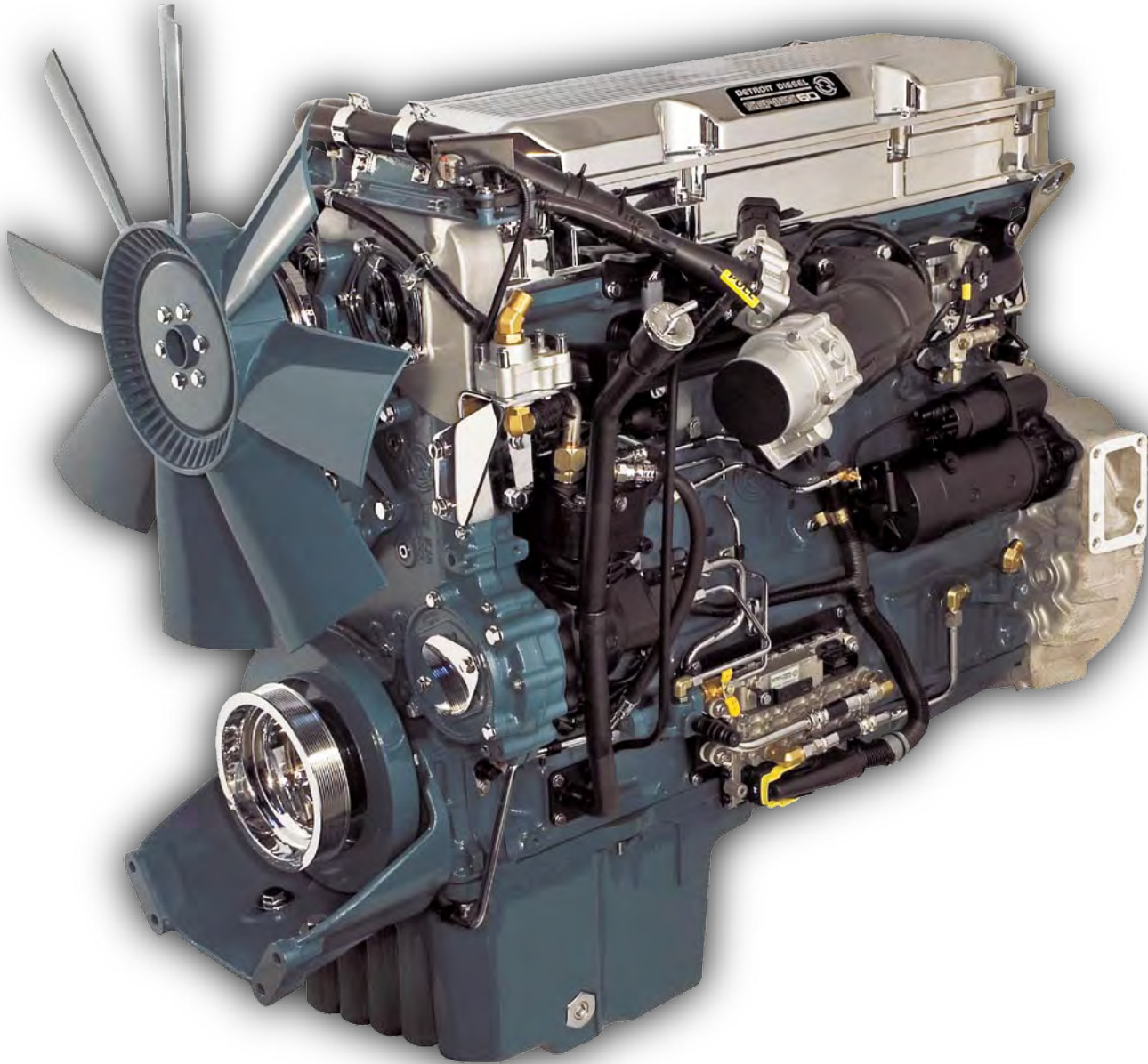
The Aftertreatment System uses a “doser” to initiate active regeneration. When the amount of soot inside reaches a certain level, the doser injects a measured amount of diesel fuel into the exhaust flow, which will react with the catalyst to raise the temperature to a point which enables regeneration.

There are two types of active regeneration: in-transit and stationary. In-transit regeneration occurs when the truck is in motion. In cases when the truck's driving cycle is insufficient for in-transit active regeneration, stationary active regeneration is required. This is performed when the truck is parked and monitored by the driver or a service technician.

INTAKE THROTTLE

The intake throttle also assists in the regeneration process. When necessary, this device will limit the amount of air entering the engine, thereby raising the exhaust temperature and facilitating regeneration.





CHANGES FOR 2007

No question about it: The 2007 EPA diesel-emissions mandate was one of the most challenging engineering tasks Detroit Diesel has confronted, demanding more time, effort and resources than any other single program since the Series 60 was originally developed. The 2007 Series 60 engine is not only far cleaner than its predecessors — it's stronger too.

UNALTERED MAINTENANCE SCHEDULES, UNMATCHED SERVICE AND WARRANTY

MAINTENANCE INTERVALS (MILES)

Maintenance Item	Severe	Short-Haul	Long-Haul
Engine Oil and Filter Change*	15,000	20,000	30,000
Fuel Filter Change	10,000	15,000	15,000
Valve Lash Adjustment	30,000	45,000	60,000

* Based on using Detroit Diesel approved lube oil and oil analysis program.

Severe-Duty: Less than 6,000 annual miles. Short-Haul: 6,000 to 60,000 annual miles. Long-Haul: Over 60,000 annual miles.

PARTS, SERVICE AND WARRANTY

The 2007 Series 60 engine is backed by a two-year, unlimited mileage warranty that covers 100 percent of the cost of parts and labor. Major components are covered for five years or 500,000 miles with 100 percent parts coverage. Extended service coverage options are also available through authorized Detroit Diesel service centers.

Parts and service are available at more than 800 Detroit Diesel authorized service locations throughout North America. Factory certified technicians know your Series 60 inside and out and are ready to help. For roadside assistance, technical support or locating the nearest service center, contact the Detroit Diesel Hotline at 1-800-445-1980.

WARRANTY PERIOD

Item	Warranty Limitations (Whichever Occurs First)		Repair Charge to be Paid by Owner	
	Months	Miles / Kilometers	Parts	Labor
* Engine	0 - 24	Unlimited	No Charge	No Charge
Accessories	0 - 24	0 - 100,000 mi 0 - 160,000 km	No Charge	No Charge
Upon expiration of the 24 month warranty coverage, but within 500,000 mi / 800,000 km of use, the warranty continues to apply as follows:				
* Major Components	25 - 60	0 - 500,000 mi 0 - 800,000 km	No Charge	100% of Service Outlet's Normal Charge

* Includes Jacobs Vehicle Systems braking devices, 50DN and T1 alternators, if so equipped.

* Cylinder Block/Head, Crankshaft, Camshaft, Main Bearing Bolts, Flywheel Housing, Connecting Rod Assemblies, Oil Cooler Housing, Water Pump Housing and Air Inlet Housing.

WWW.DETROITDIESEL.COM



For more information, call 1-800-445-1980. www.detroitdiesel.com PT 1M, 6SA2000 (0603).

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