UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MAY 27 1999

Dear Heavy Duty Engine Rebuilder,

This letter contains **important** information regarding the Low NOx Rebuild Program required under the recent settlements between EPA and seven heavy duty diesel engine manufacturers (listed below) applicable to certain heavy duty engine models. This letter includes information about:

- Your obligations with respect to installing Low NOx Rebuild kits on engines you rebuild
- How you can determine when you must use the Low NOx Rebuild kits during an engine rebuild, what engines are covered, and what kit is required
- How you can determine what kinds of engine repair or maintenance are considered to be rebuilds subject to the Low NOx Rebuild Program
- What the potential consequences are of failing to use the appropriate Low NOx Rebuild kit on a covered engine
- How you can obtain additional information regarding this program

Please read this letter carefully. If you have any questions please contact EPA at the address set forth below.

The United States believes that around 1990 most diesel engine manufacturers began installing illegal software that does not comply with the Clean Air Act in the computers that run their diesel engines. While the diesel engine manufacturers dispute whether the software is illegal, all parties agree the software substantially increases emissions of oxides of nitrogen (NOx), a harmful pollutant, during highway driving. As part of their settlement agreements with the United States, Caterpillar Inc., Cummins Engine Company Inc., Detroit Diesel Corporation, Mack Trucks Inc., Renault V.I., Volvo Truck Corporation, and Navistar International Transportation Corporation agreed to provide Low NOx Rebuild kits for diesel engines manufactured by them to decrease NOx emissions from the engines. The Low NOx Rebuild kits

will consist of software and (in some cases) minor hardware parts only. The Low NOx Rebuild will occur at the time of engine rebuild to minimize the burden on vehicle owners and service facilities. The installation of Low NOx Rebuild kits will significantly reduce NOx emissions over the life of the engines.

The availability of Low NOx Rebuild kits will be phased in according to schedules determined by the engine manufacturers. Navistar will provide kits for 1998 model year engines only; all the other listed manufacturers will supply kits for either model year 1993 through 1998 or for model year 1994 through 1998, at their option. The engine manufacturers' authorized dealers, distributors, repair facilities and rebuild facilities will be notified directly by their respective engine manufacturer(s) when the kits are available. All other rebuilders may check Low NOx Rebuild Kit availability either:

- By contacting the engine manufacturer's authorized dealers or rebuilders,

- By fax from EPA by telephoning the EPA Automated Telefax System at (202) 564-9660 Press 3 for "other documents about air pollution issues", then key in either 320 for a copy of this letter and a list of responses to frequently asked questions (FAQ), or key in the appropriate manufacturer code[1]. Follow instructions to key in your fax number. The documents will be sent to your fax machine. The greeting may be skipped by pressing the # key.

- Via the Internet on EPA's Air Enforcement Division web page at www.epa.gov/oeca/ore/aed/ Click on the "Diesel Engine Settlement" button. The "Diesel Engine Settlement" page contains information regarding all aspects of the settlement. Once there, select the button for the "Low NOx Rebuild program".

- By writing to EPA's Air Enforcement Division at the address below, specifying the name(s) of manufacturer(s) for which you rebuild engines:

EPA
Air Enforcement Division Mail Code 2242A
401 M Street
Washington, DC 20460
attn: Low NOx Rebuild

---

[1]Manufacturers have been assigned the following codes in the EPA Automated Telefax System: Caterpillar - 321, Cummins - 322, Detroit Diesel - 323, Mack and Renault - 324, Volvo - 325, and Navistar - 326.

For the purposes of this letter, an engine rebuild means an activity occurring over one or more maintenance or repair events involving the disassembly of the engine, including removal of the cylinder heads, and the replacement or reconditioning of more than one Major Cylinder Component in more than half of the cylinders for heavy heavy-duty[2] engines that have accumulated more than 290,000 miles or for medium heavy-duty[3] engines that have accumulated more than 185,000 miles. For heavy heavy-duty engines with fewer than 290,000 miles or medium heavy-duty engines with fewer than 185,000 miles, an engine rebuild means an activity where the service event includes replacement or reconditioning of more than one Major Cylinder Component in all of the engine's cylinders. Major Cylinder Component means a piston assembly, cylinder liner, connecting rod, or piston ring set.

Once available, a Low NOx Rebuild kit must be used whenever one of the applicable engines is rebuilt. Failure to install a Low NOx Rebuild kit as required or removal of a Low NOx Rebuild kit once installed may constitute tampering under Section 203(a)(3) of the Clean Air Act. Section 205 of the Clean Air Act provides for a maximum civil penalty of $27,500 for any manufacturer or dealer and $2,750 for any person who violates Section 203(a)(3). EPA may consider each engine involved as a separate violation of the Act.

The engine manufacturer will authorize its authorized dealers, distributors, repair facilities, and rebuild facilities to install Low NOx Rebuild kits at no added cost to the owner of the engine above the amount the owner would otherwise pay to have the engine rebuilt or repaired. Additionally, the engine manufacturer will make available, either directly or through its affiliated distribution networks, at no added cost, the appropriate Low NOx Rebuild kit to any non-affiliated engine rebuilder or person who requests it. The customer acquiring a Low NOx Rebuild kit will not be charged for any required reprogramming through its authorized dealers, distributors, repair facilities, and rebuild facilities, including any computer connection fees.

---

[2]*Heavy heavy-duty diesel engines* are sleeved and designed for multiple rebuilds. Their rated horsepower generally exceeds 250 hp. Vehicles using these engines are normally tractors, trucks, and buses used in inter-city, long-haul applications. These vehicles normally exceed 33,000 lbs. GVWR.

[3]*Medium heavy-duty diesel engines* may be sleeved or non-sleeved and may be designed for rebuild. Rated horsepower generally ranges from 170 to 250 hp. Vehicles utilizing these engines typically include school buses, tandem axle straight trucks, city tractors, and a variety of special purpose vehicles such as small dump trucks, and trash compactor trucks. Typical applications for these vehicles would include commercial short haul and intra-city delivery and pickup. Engines in this group are normally used in vehicles whose GVWR varies from 19,500-33,000 lbs.

If you have any questions regarding Low NOx Rebuild Kits, please call Anne Wick of EPA at (202) 564-2063.

Sincerely,

Richard D. Bird, Jr.

Bruce C. Buckheit, Director
Air Enforcement Division