

November 22, 2000

To: All U.S. Detroit Diesel Affiliated Distributors and Dealers, and
Remanufacturing Centers

Attn: Distributor/Dealer Principal
Remanufacturing Center Principal
Distributor Branch Manager
Service Manager
General Parts and Parts Managers
Regional Product Support Managers

Subject: **Low NOx Rebuild – Third Release**

The purpose of this letter is to notify you that Detroit Diesel Corporation (DDC) will be releasing the third round of Low NOx Rebuild ECM calibrations on December 22, 2000. Similar to the first and second Rebuild releases, these additional calibrations, identified as 6N4D groups, will provide reductions in steady-state NOx emissions while maintaining the characteristic performance and reliability of the Series 60 engine. As stated in the first Low NOx Rebuild letter issued December 15th, 1999, the Low NOx Rebuild Program is an outcome of the Consent Decree between the United States and DDC. This third release completes the planned releases for this program.

The Low NOx Rebuild Program of the Consent Decree requires that all qualifying Series 60 engines built between 1994 and 1998 that are undergoing an overhaul, repair or reconditioning within the United States, adhere to the Low NOx Rebuild Program provisions. Those requirements state that for Series 60 engines that have accumulated more than 290,000 miles, rebuilds must fully comply if the rebuild activity includes the repair or reconditioning of four or more cylinder kits or the repair or reconditioning of more than one major cylinder kit component in four or more cylinders. (A major cylinder kit component means a piston, skirt, piston ring set, cylinder liner, wrist pin or connecting rod.) For Series 60 engines having less than 290,000 miles, the rebuild must fully comply if all cylinder kits or major cylinder kit components are repaired or reconditioned. Additionally, for overhauls conducted in which a remanufactured $\frac{3}{4}$ engine is installed, the Low NOx Rebuild requirements are fully applicable. Attached for your reference is a two-page document defining how an engine qualifies for a Low NOx Rebuild.

Adhering to the Low NOx Rebuild Program entails the reprogramming of the engine ECM. DDC has released a Low NOx Rebuild Kit (**p/n 23527000**) which can be ordered through the DDC's Canton Parts Distribution Center. This kit consists of an envelope which includes the necessary instructions for correctly carrying out the Low NOx Rebuild, a DDC label which must be affixed to the engine rocker cover once an engine has been reprogrammed, and a protective clear label which must be affixed over

the reprogram label. The label provides space for the rebuilder to write his or her name and the date that the rebuild was completed. This label must be filled out completely.

DDC will provide this Low NOx Rebuild Kit at *no additional cost* to our customers. This letter is authorizing all U.S. DDC Dealers and Distributors to make available and distribute the Low NOx Rebuild Kit for those engines that qualify for the Low NOx Rebuild Program. Low NOx Rebuild Kits are also made available to independent and non-DDC affiliated repair and rebuild facilities through the DDC Dealer and Distributor network. Non affiliated repair and rebuild facilities have been alerted to the Low NOx Rebuild Program through the US EPA. DDC's dealers and distributors are authorized to reprogram engine ECMs to the Low NOx Rebuild ratings at no cost. Additionally, independents are entitled to the Low NOx Rebuild Kit (p/n 23527000) containing the Rebuild instructions and labels. DDC Dealers and Distributors will reprogram ECMs free of charge for these outlets for engines under the program. In a further attempt to instruct the independent rebuilders, DDC has revised the 18SP installation instructions typically provided in cylinder kit and overhaul assemblies. The installation instructions now include the requirements of the Low NOx Rebuild Program.

As mentioned, all Low NOx Rebuilds will be conducted at no added cost to the end-user. Engine owners are responsible for the normal costs associated with the engine repair, including parts and labor and in addition, if an engine rating upgrade is performed, any costs normally incurred as part of an engine rating upgrade. DDC will reimburse service outlets that perform ECM programming, i.e. 30 minutes of total labor time associated with the reprogramming of the DDEC ECM. Reimbursement will be made via a warranty claim (AFA). AFAs (Application For Adjustment) should be submitted as a claim type 03, (policy) with an activity indicator of LONOX. Complaint code will be XX (no complaint), and failure code will be 098 (DDC request). Primary failed part should be listed as "REPROGRAM".

Once available, a Low NOx Rebuild engine rating must be used whenever one of the applicable engines is rebuilt. Failure to program a Low NOx Rebuild rating, or removal of a Low NOx Rebuild calibration once installed, may according to EPA 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). US EPA may consider each engine involved as a separate violation of the Act.

If you have any questions regarding the Low NOx Rebuild Program please contact the writer at (313)-592-7568 or DDC Technical Service at (313)-592-5977.

Sincerely,

Don Keski-Hynnala
Manager, Emissions Programs

Attachment

Attachment

Detroit Diesel Low NOx Rebuild Program

To qualify for a Low NOx Rebuild one must answer yes to the following questions.

- Is the Series 60 engine serial number between 6R157655 and 6R472018?
- Is the engine model one of the following?

6067-GK60, 6067-GK28, 6067-TK60, 6067-TK28, 6067-PK60, 6067-PK28
6067-WK60, 6067-WK28, 6067-SK60, 6067-SK28, 6067-EK60, 6067-EK28
- Are you repairing, reconditioning or overhauling the engine?
- Are you repairing or replacing more than one major cylinder kit component?
(Piston, skirt, rings, liners or connecting rods)
- If greater than 290,000 miles, are you working on four or more cylinders, or if less than 290,000 miles are you working on all six cylinders?
- If you've answered yes to all of the above and the DDEC ECM is programmed to any of the current 6N4D horsepower packages listed in the attached table, then reprogram the ECM to the new Low NOx 6N4D group. Fill out and place the Rebuild sticker on the engine rocker cover once reprogramming is completed. Place the protective clear sticker over the Rebuild sticker.
- If the engine ECM does not utilize any of the current 6N4D groups listed in the attached table, then the engine does not qualify under the Low NOx Rebuild Program.
- If you have questions, call DDC Technical Service at 313-592-5977.

Attachment

Detroit Diesel Low NOx Rebuild Program

CURRENT GROUP	LOW NOx GROUP	CURRENT GROUP	LOW NOx GROUP
Series 60 12.7L	U.S. 1994 - 1997	Series 60 11.1L	U.S. 1994-1995
6067-GK60/28		6067-WK60/28	
6000	7041	6005	7155
6001	7075	6006	7156
6002	7076	6007	7157
6011	7077	6008	7158
6012	7078	6009	7159
6013	7079	6015	7160
6026	7080	6016	7161
6036	7081	6017	7162
6053	7082	6018	7163
		6019	7164
		6020	7165
Series 60 12.7L	U.S. 1998	6021	7166
6067-TK60/28		6022	7167
		6027	7168
6214	7083	6032	7169
6220	7088	6033	7170
6228	7084	6034	7171
6229	7085	6043	7172
6235	7086	6082	7173
6236	7087	6083	7174
6484	7128		
7098	7129		
Series 60 12.7L	U.S. 1994 - 1997	Series 60 11.1L	U.S. 1994-1995
6067-GK60/28		6067-SK60/28	
6003	7130	6090	7175
6014	7131	6091	7176
6055	7132	6094	7177
6056	7133	6097	7178
6062	7134	6099	7189
6063	7135	6101	7179
6076	7136	6104	7190
6086	7137		
6087	7138	Series 60 12.7L	U.S. 1998
6122	7139	6067-TK60/28	
6124	7140		
6125	7141	6215	7180
6133	7142	6232	7181
6145	7143	6247	7184
6146	7144	6248	7185
6153	7145	6249	7186
6154	7146		
6170	7147		
6186	7148	Series 60 12.7L	U.S. 1998
6187	7149	6067-PK60/28	
6188	7150		
6189	7151	6242	7182
6190	7152	6243	7183
6191	7153	6250	7187
6192	7154	6280	7188

	CURRENTLY AVAILABLE
	AVAILABLE DECEMBER 22, 2000