State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-32

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and,

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Navistar International Transportation Corporation 1999 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Generator

<u>Fuel Type</u>: Diesel

Engine Family	Liters	(Cubic Inches)	Systems and Special Features
XNVXL0530ANC	8.7	(530)	Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

<u>Exhaust</u>	: Emissi	ons (g/l	ohp-hp)	Smoke Op	<u>oacity</u>	(%)
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

Exhaust Emissions (g/bhp-hr)			Smoke Opacity (%)			
<u>THC</u>	<u>co</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u>	<u>Luq</u>	<u>Peak</u>
0.1	0.5	5.7	0.1	-	7	-

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 24 day of November 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

Manufacturer: Navistar E. O. # U-R-12-32 Process Code: New Submission

GA250/GB230

DGA250

DGA250

EPA Engine Family: XNVXL0530ANC Manufacturer Family Name: DTA-530E

4.Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: mm/stroke @ peak HP 6. Torque @ RPM 8.Fuel Rate: 9.Emission Control (lbs/hr) (2) peak HP 3.BHP@RPM mm/stroke@peak 1.Engine Code 2.Engine Model (lbs/hr)@peak torque Device Per SAE J1930 (for diesel only) (SEA Gross) (SAE Gross) (for diesels only) torque Average value Average value ECM, TC,CAC, DI 330 @ 1500 222.6 111.9 GA330 **GA330** 113.0 ECM, TC,CAC, DI 325 @ 1800 187.2 GA325 GA325 ECM, TC,CAC, DI 310 @ 1500 210.4 105.7 GA310 **GA310** ECM, TC,CAC, DI 305@1800 175.0 105.5 GA305 GA305 ECM, TC,CAC, DI **GA300** 300 @ 1500 206.1 103.6 **GA300** ECM, TC,CAC, DI GA275 275 @ 1500 188.7 94.8 GA275 ECM, TC,CAC, DI 270 @ 1800 156.4 94.3 GA270 GA270 ECM, TC,CAC, DI 250 @ 1500 168.3 **GB250 GB250** 84.6 ECM, TC,CAC, DI 250 @ 1800 GA250 GA250 145.8 87.9 ECM, TC,CAC, DI 230 @ 1500 **GB230 GB230** 150.6 75.7 Can Be Either **Dual Ratings DGA325 DGA325** GA325/GA300 **DGA305** GA305/GA275 DGA305 **DGA270** GA270/GB250 **DGA270**