State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-43

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 2000 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.

Fuel Type: Dies	el	Exhaust Emission Control	
Engine Family	Liters	(Cubic Inches)	Systems and Special Features
YNVXL0530AND	8.7	(530)	Turbocharger Engine Control Model

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):

Exhaust Emissions (g/bhp-hr)			Smoke Opacity (%)			
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Luq</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 (q/bhp-hr)				Smoke	Smoke Opacity (%)			
THC	<u>co</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>		
0.1	0.6	5.4	0.1	-	4	-		

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 170 day of June 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

Process Code: New Submission

Manufacturer: Navistar E. O. # U-R-12-43

	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	ECM, TC, DI	ECM, TC, DI	ECM, TC, DI	ECM, TC, DI	ECM, TC, DI			
	e: 9.Er torque Devica		Ш	ш	ш	ш	•	<u>.</u> .	
	8.Fuel Rate: (lbs/hr)@peak to								
DT-530E	7.Fuel Kate: mm/stroke@peak torque	÷			:				
. Fam 6.1	6.Torque @ RPM (SEA Gross)								
	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	Average value 81.4	78.0	73.9	72.7	64.6			
	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	Average value 135.0	155.2	122.6	144.7	128.6			
EPA Engine Family: YNVXL0530AND	3.BHP@RPM (SAE Gross)	Advertised 230 @ 1800	215 @ 1500	205 @ 1800	200 @ 1500	175 @ 1500	Can Be Either	GCA230 OR	GCA205 OR GCB175
	2.Engine Model	GCA230	GCB215	GCA205	GCB200	GCB175		GCD230	GCD205
	1.Engine Code	GCA230	GCB215	GCA205	GCB200	GCB175	Dual Ratings	GCD230	GCD205