

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-20-1

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

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

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 Corp., 1998 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: Loaders, Tractors, Pumps and Compressors

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
WNVXLO530BNA		Turbocharger
(DTA-466)	7.8 (466)	Smoke Puff Limiter
(DTA-530)	8.8 (530)	Charge Air Cooler

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 matters (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 Emissions (g/bhp-hr)</u>				<u>Smoke Opacity (%)</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:

<u>Engine Family</u>	<u>Exhaust Emission (g/bhp-hr)</u>				<u>Smoke Opacity (%)</u>		
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
WNVXLO530BNA (DTA-466 & DTA-530)	0.1	0.4	5.1	0.1	7	4	15

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.

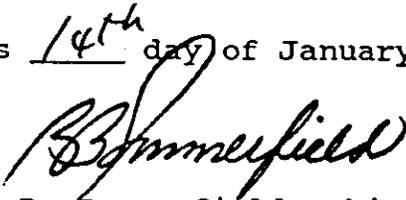
BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

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.).

Executive Order U-R-12-20, dated January 7, 1998, is hereby superseded by Executive Order U-R-12-20-1.

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

Executed at El Monte, California this 14th day of January 1998.


R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

11/20/97

Manufacturer: Navistar E.O. # U-R-12-20-1

Process Code: New Submission

EPA Engine Family: WNVXL0530BNA

Manufacturer Family Name: DTA-530 &

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mmi/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mmi/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
IA250	IAL250	250@2000	129.8	87.0	850@13000	169.6	73.9	DI,TC,SPL,CAC
IA250	IA250	250@2200	123.0	90.7	755@1600	145.8	78.2	DI,TC,SPL,CAC
IA265	IA265	265@2100	137.0	96.4	900@1500	171.1	86.0	DI,TC,SPL,CAC
IA275	IA275	275@2000	140.4	94.1	950@1300	189.4	82.5	DI,TC,SPL,CAC
IA290	IA290	290@2100	150.1	105.6	920@1500	184.5	92.7	DI,TC,SPL,CAC
IA300	IAL300	300@2000	156.2	104.7	1050@1300	213.0	92.8	DI,TC,SPL,CAC
IA300	IA300	300@2200	158.8	117.1	1075@1300	209.3	91.2	DI,TC,SPL,CAC
IA330	IA330	330@2000	184.6	123.7	1050@1300	196.1	85.4	DI,TC,SPL,CAC
IA250	IA250	250@2400	118.3	95.1	660@1600	144.5	77.5	DI,TC,SPL,CAC
IA275	IA275	275@2400	127.6	102.6	800@1600	159.5	85.5	DI,TC,SPL,CAC