

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-24

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 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: Loader, Tractor, Pump, Compressor

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
WNVXL0530ANA	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 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>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>
0.1	0.4	5.6	0.1	15	3	31

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

1. Any engine which employs a defeat device shall not be covered by this Executive Order.
2. Within 90 days following the issuance of this Executive Order, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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 28th day of July 1998.



R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

Manufacturer: **Navistar E. O. # U-R-12-24** Process Code: **New Submission**

EPA Engine Family: **WNVXL0530ANA** Manufacturer Family Name: **DTA-530E**

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
IA330	IA330	330 @ 2000	181.3	121.5	1050 @ 1300	204.3	89.0	ECM, TC, CAC, DI
IA320	IA320	320 @ 2100	166.3	117.0	945 @ 1500	185.0	93.0	ECM, TC, CAC, DI
IA315	IA315	315 @ 2200	153.5	113.2	978 @ 1700	190.1	108.3	ECM, TC, CAC, DI
IAL315	IAL315	315 @ 2100	165.6	116.5	945 @ 1500	185.0	93.0	ECM, TC, CAC, DI
IA300	IA300	300 @ 2000	157.1	105.3	1050 @ 1300	198.6	86.5	ECM, TC, CAC, DI
IAB300	IAB300	300 @ 2200	158.0	116.5	1075 @ 1300	204.2	89.0	ECM, TC, CAC, DI
IAF300	IAF300	300 @ 2000	165.9	111.2	950 @ 1300	182.0	79.3	ECM, TC, CAC, DI
IA290	IA290	290 @ 2100	146.4	103.0	831 @ 1700	153.6	87.5	ECM, TC, CAC, DI
IA265	IA265	265 @ 2200	124.1	91.5	822 @ 1700	148.3	84.5	ECM, TC, CAC, DI
IAB265	IAB265	265 @ 2200	132.6	97.8	850 @ 1300	165.2	72.0	ECM, TC, CAC, DI
IAL265	IAL265	265 @ 2100	130.0	91.5	831 @ 1500	158.2	79.5	ECM, TC, CAC, DI
IA260	IA260	260 @ 2200	121.4	89.5	822 @ 1600	144.5	77.5	ECM, TC, CAC, DI
IA250	IA250	250 @ 2200	113.9	84.0	755 @ 1600	138.9	74.5	ECM, TC, CAC, DI
IAL250	IAL250	250 @ 2000	131.3	88.0	850 @ 1300	165.2	72.0	ECM, TC, CAC, DI
IA240	IA240	240 @ 2200	119.4	88.0	775 @ 1300	151.4	66.0	ECM, TC, CAC, DI