

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-15

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 1997 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: Tractor, Wheel Loader, Industrial Equipment

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
VNV530R6DARA	8.7/7.6 (530/466)	Turbocharger 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-hp)</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 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>
VNV530R6DARA	0.1	0.8	5.1	0.1	8	5	15

IA300	300 @ 2200	(123.7) 158.8	1822188C01	1822188C01	1822188C01	1822188C01
-------	------------	------------------	------------	------------	------------	------------

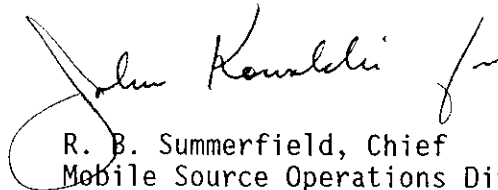
BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

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 16th day of December 1996.


R. B. Summerfield, Chief
Mobile Source Operations Division

E.O. # U-R-12-15

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY OFF-ROAD DIESEL ENGINES

Page 1 of 1

Manufacturer Navistar International Transportation Corp. Engine Family VNV530R6DARA
 Displacement: 8.7 & 7.6 / 530 & 466 Liters / Cubic Inches Engine Configuration: I-6
 All Eng Codes in Eng Family: CA 49 50S X Cert Test Procedures: ARB X EPA X
 Valves / Ports per Cylinder 2 valves / cylinder Stroke per Combustion Cycle 4 - stroke
 Maximum Rated Power 330 HP @ 2000 RPM (246 KW) @ 2000 RPM
 Ignition: Compression X Compression with Glow Plug Spark
 Fuel Types: Dedicated X Flex-Fuel Dual-Fuel Gasoline Diesel X M100
 M85 CNG LNG LPG Other (specify)
 Diesel Cert Fuel: 40 CFR 86.1313-94 X Other (specify)
 Primary Service Equipment: Tractors, Wheel loaders, Industrial equipment.
 Exhaust ECS (e.g., MFL, TC, CAC): EM DI TC CAC

(Use abbreviations per SAE J1930 JUN93)

Engine Mode (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ / stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM / PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
<u>DTA-530</u>			<u>Pumps</u>	<u>Nozzles</u>		
A330	330 @ 2000	184.6 (123.7)	1822681C91	1824779C91		
IA300	300 @ 2200	158.8 (117.1)	1823388C91	1824779C91		
IAL300	300 @ 2000	156.2 (104.7)	1821048C91	1824779C91		
IA290	290 @ 2100	150.1 (105.6)	1821048C91C 1829988C91	1824779C91		
IA275	275 @ 2000	140.4 (94.1)	1821048C91A	1824779C91		
IA265	265 @ 2100	137.0 (96.4)	1824624C91A 1829908C91	1824779C91		
IA250	250 @ 2200	123.0 (90.7)	1824624C91	1824779C91		
IAL250	250 @ 2000	129.8 (87.0)	1821048C91B	1824779C91		
<u>DTA-466</u>						
IA275	275 @ 2400	127.6 (102.6)	1820269C91	1823937C91		
IA250	250 @ 2400	118.3 (95.1)	1820269C91A	1823937C91		

Date Issued: 11/8/96

Revisions:

97nr^17, pp8

17.01-82 DTA-530 / 466 PLN