## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-12-7

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 1996 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	<u>Liters</u>	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TNV530R6DASD	8.7	(530)	Turbocharger

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):

Exhau	<u>ust Emissi</u>	ons (g/bhp	<u>-hr)</u>	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:

	<u>Exha</u>	ust Emiss	ion (g/bh	<u>Smoke</u>	Smoke Opacity ( % )			
Engine Family	<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>	
TNV530R6DASD	0.2	0.6	5.5	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.  $_{\mathcal{A}}$ 

Executed at El Monte, California this

le Karalahi

day of March 1996.

R. B. Summerfield Assistant Division Chief Mobile Source Division

## 1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OFF-ROAD DIESEL ENGINES Page \_ 1\_ of \_ 1\_.

Manafacturer	Navistar Intern	ational Tr	ansportati	іоп Согр.		Engi	ne Fan	nilv	TNVS	30R6DA	SD	
Displacement:	8.7		530		Cubic Inch			-	Engine (			[ - 6
All Eng Codes in		CA	49	- 50S	X		Test P	rocedur		_	EPA	<u> </u>
Valves / Ports per		2 valv	es / cylin	der	s	troke per				4 - stro		
Maximum Rated	Power	230	HP	<u>@</u>	1800	RPM	(	172	KW)	<u> </u>	1800	RPM
Ignition: Con	npression	X (	 Compress	ion with G	low Plug	<u> </u>	S	park	<del>-</del> '''''	<b>.</b> _	1000	_ KT M
Fuel Types: D	edicated X	Flex-Fue	el	Dual-Fuel	G	asoline	•	Diesel –	x	M100		
= ::	185 <u>CN</u>		LNG	LP	G	Other (s				-	<del></del> -	
Diesel Cert Fuel:		.1313-94	X			Other (s		·				
Primary Service E		enerators	<del></del>			<b>X</b> - J	7	´ —		<del></del>		
Exhaust ECS (e.g	g., MFI, TC, C	CAC):	EM	DI TC		· .						

(Use abbreviations per SAE J1930 JUN93)

Engine Model (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.
GA230	230 @ 1800	146.1 (88.1)	Pumps 1823837C91F, * C92F Nozzles 1822141C91			
GA205	205 @ 1800	130.3 (78.6)	Pumps 1823837C91H, * C92H Nozzles 1822141C91			

Date Issued: 2/19/96

Revisions: \*5/17/96 [ |

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17.01-99	DT-530	PLN