State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-207

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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 1998 model-year Navistar International Transportation Corporation diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

<u>Fuel Type</u>: Diesel

Engine Family		Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features						
WNVXH0530CCD	8.7	(531)	Turbocharger Charge Air Cooler Engine Control Module Oxidation Catalytic Converter						

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour:

Total	Carbon	Nitrogen	<u>Particulates</u>				
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>					
1.3	15.5	4.0	0.10				

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
0.1	3.2	4.0	0.08

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 2035 et seq.).

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.

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

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 10 day of December 1997.

R. B. Summerfield Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

Process Code: New Submission

Manufacturer: Navistar A-4-207

		A330C		AF320C				A300C			AF300C			ALSOUC		1.Engine Code		EPA Engine Fa									
		A330C		AF320C			AF320C		AF320C		AF320C		AF320C				A300C			AF300C			AL300C		2.Engine Model		EPA Engine Family: WNVXH0530CCD
	2000	330 @ 2000		320 @ 2000			300 @ 2000			300 @ 2000			300 @ 2000			3.BHP@RPM (SAE Gross)	1	530CCD									
	1/9.4	170			172 4			164 6			164.6			164.6		mm/stroke @ peak HP (for diesel only)	4.Fuel Rate:										
	120.2			-10.0	11777	i		1100		i	110.2		i	110.2		<u>-</u> (€	5.Fuel Rate	Manufacturer Family Na									
	950 @ 1300			950 @ 1300		950 @ 1300			1000 @ 1300	1050 0 1200		900 @ 1000	050 @ 1300		000 @ 1300	860 @ 4300	(0000)	6.Torque @ RPM	,	Family Name:							
	179	179			199.2			179			161.9		torque	7.Fuel Rate: mm/stroke@peak	TANK ANAL	INT 520E											
	78			78			86.8			78			70.5		(lbs/nr)@peak torque	8.Fuel Rate:	1										
CAC, OC	DI, ECM, TC,		CAC OC	DI, ECM, TC,	•	CAC, OC	DI, ECM, TC,	•	CAC, OC	DI, ECM, TC,	•	CAC, OC	DI, ECM, TC,		(IDS/Nr)@peak torque Device Per SAE J1930	9.Emission Control											