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1. June 1. 1

State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-190

Relating to Certification of New Medium-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 1997 model-year Navistar International Transportation Corporation diesel-cýcle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) of 8,501 to 14,000 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	Engine	Displacement	Exhaust Emission Control
	<u>Liters</u>	(Cubic Inches)	Systems and Special Features
VNV7.3W8DOAK	7.3	(444)	Turbocharger Oxidation Catalytic Coverter Engine Control Module

Engine models and codes are listed on attachments.

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

Non-Methane Hydrocarbons + Nitrogen Oxides	Carbon <u>Monoxide</u>	<u>Particulates</u>	
<u>+ Mitrogen Oxides</u> 3.9	14.4	0.10	

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

Engi <u>ne Family</u>	Non-Methane Hydrocarbons + Nitrogen Oxides	Carbon <u>Monoxide</u>	<u>Particulates</u>
VNV7.3W8DOAK	3.7	2.6	0.09
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BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional standards and test procedures applicable to incomplete and diesel medium-duty vehicles of 8,501 to 14,000 pounds GVWR pursuant to Title 13, California Code of Regulations, Section 1956.8(g).

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

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BE IT FURTHER RESOLVED: That the listed engine models shall be subject to the in-use compliance provisions applicable to 1995 and subsequent model-year medium-duty vehicle engines set forth in Title 13, California Code of Regulations, Section 2139(c).

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) 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 2035 et seq.).

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 26^{-4} day of June 1996.

R) B. Summerfield Assistant Division Chief Mobile Source Division

NO.440 P.2 JUN. 19, 1996 4:12PM 2ND FLR EAST AD BLDG E.O.# A-4-190____ 1997_MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page 1_____ DIESEL MEDIUM-DUTY VEHICLE ENGINES (CERTIFIED USING HEAVY-DUTY DIESEL ENGINE TEST PROCEDURES) Manufacturer: <u>Navistar International</u> Engine Family: <u>VNV7.3W8DOAK (7.3DIT)</u> Engine Config: V-8 Valve/Cyl: 2 Displ: 7.3 / Liters 444 / CID Cert Std: Tier-1 X LEV ULEV Engine Intended Service Class: M4 M5 In-Use Stds: Full In Use Alt In Use Max Rated Power: 225 HP @ 2700 & 3000 RPM Strokes/Cycle: 4 All Eng Codes in Eng Family: CA_X_49___50S___ Spark Compress w/ Glow Plug_____ Ignition: Compress<u>X</u> Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Diesel X CNG LNG_____ LPG____ M85___ M100___ Other (specify)___ Emiss Test Fuel(s): Diesel: 13 CCR 2282 40 CFR 86.1313-90 40 CFR 86.1313-94 X CNG___ LPG___ M85____ M100___ Other (specify)____

Exhaust ECS (e.g. OC, TWC, PTOX, IFI, TC, CAC) DI, TC, OC, ECM (Use abbreviations per SAE J1930 Sep91)

Engine Mode (Eng. Code)	Rated HP @ RPM	Fuel Rate @Rated HP mm /sTroke (lbs/hr)	Fuel Pump & Injector Part No	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalyti Converte: Part No.
A225C	225 @ 3000	75.0(100.5)	<u>Injectors</u> 1822803C1	<u>ECMs</u> F7TF-12A650-RB F7TF-12A650-PB		/\\
						1823547C1 1823548C1 1823549C1 1825121C1
(Same)	225 @ 2700	76.7 (92.6)	1822803C1	F7TF-12A650-AHB		
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Date Issued: 5/23/96

Revisions:

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