

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-243-23

Relating to Certification of New Heavy-Duty Engines and Vehicles

VOLVO TRUCK 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 Volvo Truck Corporation diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Engine Displacement Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
VVT6.7D6DBRA (VED7)	6.7	(409)	Turbocharger Charge Air Cooler Smoke Puff Limiter

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:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.10

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

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
0.3	1.0	5.0	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.).

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 29th day of April 1998.



R. B. Summerfield, Chief
Mobile Source Operations Division

Page is satisfactory unsatisfactory
 Date: _____ ARB Rep: _____
 Section, Family and Page
VII. CAL-6.7A -1
 Issue Date: **1996-06-17**
 Revision Number and Date: _____

1997 MY AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET E.O# _____
HEAVY-DUTY DIESEL - STANDARD ENGINES A-243-23

Manufacturer: Volvo Truck Corporation Engine Family: VVT6.7D6DBRA (VE D7)
 Displacement: 6.7 Liters 409 Cubic Inches
 All Eng Codes in Eng Family: CA 49S 50S Strokes/Cycle: 4 Valves/Cylinder: 2
 Ignition: Compression Compression with Glow Plug _____ Spark _____
 Fuel Type(s): Dedicated Flex-Fuel _____ Dual-Fuel _____ Bi-Fuel _____ Diesel CNG _____
 LNG _____ LPG _____ M85 _____ M100 _____ Other (specify) _____
 Diesel Cert Fuel: 13 CCR 2282 _____ 40 CFR 86.1313-90 _____ 40 CFR 86.1313-94
 Maximum Rated Power: 280 HP & 2200 RPM Engine Configuration: I-6
 Exhaust ECS (e.g. OC, EGR, PTOX, IFITC, CAC): EM, SPL, TC, CAC, DFI
 (use abbreviations per SAE J1930 MAY91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm3 / stroke (lbs / hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
VE D7A230 (I)	230 / 2200	123.0 (90.0)	477813 and 477885	----	----	----
VE D7A260 (II)	260 / 2200	129.0 (94.3)	477814 and 477816	----	----	----
VE D7A280 (III)	280 / 2200	142.0 (103.9)	477815 and 477816	----	----	----
VE D7A275 (IV)	275 / 2200	139.0 (101.4)	8192537 and 477816	----	----	----