

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-243-8  
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

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-45-3;

IT IS ORDERED AND RESOLVED: That the following Volvo Truck Corporation 1989 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KVT0409FPA6	6.7 (409)	Smoke Puff Limiter (Diesel Injection - Direct) (Intercooler) (Turbocharger)
KVT0586FPA7	9.6 (586)	Smoke Puff Limiter (Diesel Injection - Direct) (Intercooler) (Turbocharger)
KVT0730FPA3	12.0 (730)	Smoke Puff Limiter (Diesel Injection - Direct) (Intercooler) (Turbocharger)

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
KVT0409FPA6	0.9	3.5	5.4	0.54
KVT0586FPA7	0.4	1.8	5.1	0.36
KVT0730FPA3	0.6	1.7	5.8	0.47

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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<sup>th</sup> day of September, 1988.

  
K. D. Drachand, Chief  
Mobile Source Division

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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 HEAVY-DUTY DIESEL ENGINES

MHDD

Manufacturer Volvo Truck Corporation Engine Family KVT0409FPA6

Literal (CID) 409 CID Eng. Type L-6

Emission Control Sys. and (Special Features) SPL, (DID, IC, TC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)
TD71FCQ	Bosch 477138	Bosch 421479	225 2400	113 (88.5)	605 1400	125 (57.1)

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HEAVY-DUTY DIESEL ENGINES

HMDD

Manufacturer Volvo Truck Corporation Engine Family KVT0586FPA7

Liter (CID) 586 CID Eng. Type L-6

Emission Control Sys. and (Special Features) SPL, (DID, IC, TC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)
TD102FCQ	Bosch 422983	Bosch 422954	300 2100	163 (111.8)	955 1200	187 (73.3)

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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 HEAVY-DUTY DIESEL ENGINES

HHDD

Manufacturer Volvo Truck Corporation Engine Family KVT0730FPA3  
 Liter (CID) 730 CID Eng. Type L-6  
 Emission Control Sys. and (Special Features) SPL, (DID, IC, TC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)
TD122FEQ	Bosch 478057	Bosch 422954	340 1800	203 (119.3)	1170 1200	222 (87.1)
TD122FGQ	Bosch 478056	Bosch 422954	355 2100	194 (133.3)	1170 1200	222 (87.1)
TD122FJQ	Bosch 478223	Bosch 422954	345 1900	199 (123.7)	1170 1200	222 (87.1)

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