

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-59  
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 1990 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>
LVT12.0FPA2	12.0	(730)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LVT06.7FPA3	6.7	(409)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LVT05.5FPA0	5.5	(334)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)

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:

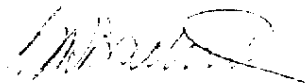
<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
LVT12.0FPA2	0.6	1.6	5.7	0.51
LVT06.7FPA3	0.9	3.5	5.4	0.54
LVT05.5FPA0	1.0	3.1	5.8	0.44

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 (Health and Safety Code Section 43205.5 and Title 13, California Code of Regulations, 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 February, 1990.



K. D. Drachand, Chief  
Mobile Source Division

Make \_\_\_\_\_ Model \_\_\_\_\_ Serial Number \_\_\_\_\_  
 Date \_\_\_\_\_ with \_\_\_\_\_  
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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 HEAVY-DUTY DIESEL ENGINES

HLDD

Manufacturer Volvo Truck Corporation      Engine Family LVT12.0FPA2

liter (CID) 12.0 (730)      Eng. Type L-6

Emission Control Sys. and (Special Features) SPL, (CAC,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)
TD122FIQ	Bosch 478451	Bosch 422954	325 1900	187 (116.1)	1150 1200	222 (87.1)
TD122FKQ	Bosch 478491	Bosch 422954	345 1900	199 (123.6)	1170 1200	222 (87.1)
TD122FPQ	Bosch 478451	Bosch 422954	365 1900	209 (130.4)	1200 1200	231 (90.5)
TD122FTQ	Bosch 478490	Bosch 422954	300 1900	174 (108.6)	1000 1200	193 (75.7)

Date of Issue \_\_\_\_\_ Revisions: \_\_\_\_\_

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 HEAVY-DUTY DIESEL ENGINES MHDD

Manufacturer Volvo Truck Corporation Engine Family LVT06.7FPA3  
 Liter (CID) 6.7 (409) Eng. Type L-6  
 Emission Control Sys. and (Special Features) SPL, (CAC,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)
D71FCQ	Bosch 477138	Bosch 421479	225 2400	113 (88.5)	605 1400	125 (57.1)

Date of Issue \_\_\_\_\_ Revisions: \_\_\_\_\_

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

MHDD

Manufacturer Volvo Truck Corporation Engine Family LVT05.5FPA0

Liter (CID) 5.5 (334) Eng. Type L-6

Emission Control Sys. and (Special Features) SPL, (CAC,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)
TD61FBQ	Bosch 420800	Bosch 465872	200 2800	90 (82.2)	465 1700	98 (54.6)
TD61FHQ	Bosch 420801	Bosch 465872	170 2800	77 (71.1)	415 1700	85 (47.2)

Date of Issue \_\_\_\_\_

Revisions: \_\_\_\_\_

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