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:

Engine Family		lacement Cubic Inches)	Exhaust Emission Control Systems (Special Features)		
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:

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

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

Engine Family	Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
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 _____ day of February, 1990.

K. D. Drachand, Chief Mobile Source Division

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

HHDD

Hanufacturer 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 Numbe	Maximum Rated HP rat RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm3/stroke (lbs/Hr)
1D155E10	Bosch	Bosch	325	187	1150	222
	478451	42295 4	1900	(116.1)	1200	(87.1)
TD122FKQ	Bosch	Bosch	345	199	1170	222
	478491	422954	1900	(123.6)	1200	(87.1)
TD122FPQ	Bosch	Bosch	365	209	1200	231
	478451	422954	1900	(130.4)	1200	(90.5)
TD122FTQ	Bosch	Bosch	300	174	1000	193
	478490	42295 4	1900	(108.6)	1200	(75.7)
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Manufactur	er Volvo Truc	ck Corporatio	<u>1</u> E	ngine F	amily _	LVT06.7F	PA3
Liter (CID	6.7 (409	9)	Eng	. Type		L-6	
Emission C	Control Sys. ar	nd (Special F	eatures)_	SPL, (CAC,	TC)	
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Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Rated HP		Rate troke Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
D71FCQ	Bosch 477138	Bosch 421479	225 2400	11. (88.		605 1400	125 (57.1)
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				. Type		
Emission C	ontrol Sys. an	nd (Special F	eatures)_	SPL, (CAC,	TC)	
			<u> </u>			
Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Rated HP	Fuel Rate mm ³ /stroke (lbs/Hr)		Fuel Rate mm ³ /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)
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