State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-243-19

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 1995 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

| Engine Family | <u>Liters</u> | (Cubic Inches) | Exhaust Emission Control Systems and Special Features |
|--------------------------|---------------|----------------|--|
| SVT12.EJDBRA (VE-D12) | 12.1 | (740) | Engine Control Module Turbocharger Charge Air Cooler |

Engine models and codes are listed on attachments.

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

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

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

| Engine | Total | Carbon | Nitrogen | <u>Particulates</u> | |
|--------------------------|---------------------|-----------------|---------------|---------------------|--|
| <u>Family</u> | <u>Hydrocarbons</u> | <u>Monoxide</u> | <u>Oxides</u> | | |
| SVT12.EJDBRA (VE-D12) | 0.1 | 2.8 | 4.9 | 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.).

VOLVO TRUCK CORPORATION

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

R. B. Summerfield

Assistant Division Chief Mobile Source Division

day of March, 1995.

1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

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| | ufacturer <u>Volvo</u> | Thuck Corner | ation | Engine Fa | mily <u>VE-D12</u> | SVT12.EJDB | |
|-----------------------------------|-------------------------------|---------------|--------------------------|----------------------|----------------------------|---------------------|-----------|
| Man | ufacturer <u>volve</u> | / 12.] | Liters | | / 74N | Cubic I | ncnes |
| U1S May | placement: imum Rated Powe | r: 425 | | 700RPM | Engine Con | nfiguration Spar | 15 |
| Tan | ition: Compres | 1510N AA | Compress | ion with Glow | Plug | M100 | M85 |
| Fire | 1 Type(s): Dec | iicated i | | Dual-Fuel | Diesel <u>XX</u> | M100 | 1100 |
| | CNG | LNG _ | LPGOth | er (specify) | 40 C | FR 86.1313- | 94 XX |
| Die | sel Cert Fuel: | 13 CCR 2282 | | R 86.1313-90_ MHD | HHD XX | Urban Bu | IS |
| Pri | mary Intended 3 | service class | LIIU | TCM TC CAC | | | |
| | Exhaust ECS (in | nci. Mri, ic, | CAC) | use abbreviat | ions per SAE | J1930 SEP91 | l) |
| | | | | | · | | PTOX / |
| | | | Fuel Rate | Fuel Pump | FOU / DOM | EGR Valve | Catalytic |
| | Engine Model | Rated HP | 0 ₂ Rated HP | & Injector | ECM/PCM | Part No. | Converter |
| | (Eng Code) | @ RPM | mm ³ / stroke | Part No. | Part No. | rait No. | Part No. |
| | | | (lbs/hr) | INJECTORS | | | |
| | | 270 /1700 | 212.0 (118.9) | 1547909 | EPG-1677605 | | |
| | VE_D12-370 | 370/1700 | 212.0 (110.5) | 101/303 | VEB-1677835 | | |
| | (1) | | | | | | |
| | VE D12-415 | 415/1700 | 239.0 (134.0) | 1547909 | EPG-1677604 | | |
| | (II) | 120, 27 00 | • | | VEB-1677834 | Ì | |
| | *-' | | | 1547000 | EPG-8148438 | | |
| | VE D12-425 | 425/1700 | 245.0 (137.3) | 1547909 | VEB-8148439 | | |
| | (III) | | | | 460-0140403 | 1 | |
| | | 070/3700 | 212.0 (118.9) | 1547 9 09 | EPG-8148386 | | |
| | VE_D12-370VT | 370/1700 | 212.0 (110.9) | 1547505 | VEB-8148389 | | |
| | (IV) | | |] | | | |
| | VE D12-415VT | 415/1700 | 239.0 (134.0) | 1547909 | EPG-8148385 | - | и. |
| - | (A) | 410/ 1/00 | | | VEB-8148388 | | |
| | *'/ | | | | FD0 1677402 | İ | |
| | VE D12-310 | 310/1700 | 179.0 (100.3) | 1547387 | EPG-1677492 VEB-1677837 | ļ - l | |
| | (IV) | | | | AEB-1011021 | l | |
| | , , | 11700 | 104 0 (100 7) | 1547387 | EPG-1677457 | | |
| | VE D12-335 | 335/1700 | 194.0 (108.7) | 1347307 | VEB-1677836 | | |
| | (VII) | • | - | | | | |
| | VE D12-335VT | 335/1700 | 194.0 (108.7) | 1547387 | EPG-1677387 | | |
| | (VIII) | 333/1700 | 13,115 (11501) | | VEB-1677390 | ' | |
| | (4111) | | | | 500 0140475 | 1 | |
| | VE D12-425VT | 425/1700 | 245.0 (137.3) | 1547909 | EPG-8148475 | | |
| | (IX) | • | | | VEB-8148476 | | |
| | • • | | , | | | | |
| | | 1 | | | | 1 | |
| EPG=EXHAUST GAS PRESSURE GOVERNOR | | | RNOR | | | 1 | |
| | V. | EB=VOLVO ENGI | NE BRAKE | 1 | | - | |
| | • | 1 | | | | | 1 |
| | | | | | | | { |
| | | | | | | | |

Date Issued:

Revisions: