State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-87

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CUMMINS ENGINE COMPANY, INC.

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 Cummins Engine Company, Inc. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
PCE0359FAB7 (403B)	5.9	(359)	Smoke Puff Limiter Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

The certification exhaust emission standards and, in accordance with the manufacturer's particulates averaging program, the particulates emission limit for this engine family in grams per brake horsepower-hour are:

Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates Emission Standard	Particulates Corporate Average	Particulates Family Limit
1.3	15.5	5.0	0.25	0.24	0.23

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

Engine Family	Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
PCE0359FAB7 (403B)	0.2	1.6	4.2	0.23

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.).

BE IT FURTHER RESOLVED: That these engines are included in a diesel heavy-duty particulates averaging program as permitted in the "California Exhaust Emission Standards for 1985 and Subsequent Model Heavy-Duty Engines and Vehicles, amended July 12, 1991", referenced section 86.091-11(a)(1)(iv)(c).

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.

Executive Order A-21-83 for engine family PCE0359FAB7 (403B) (non-averaging for particulates), dated September 22, 1992, is hereby cancelled and replaced by Executive Order A-21-87.

Executed at El Monte, California this 15th day of December, 1992.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company,Inc. Engine Family 403B PCE0359FAB7

Liter (CID) 5.9 (359) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm^3 /stroke (lbs/hr)	Fuel Pump & Injector(1) P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
B5.9-230 (0987)	230 @ 2500	104 (88)	(1)3919091 3913440 3921769	NA	NA
B5.9-210 (1422)	210 @ 2500	96 (81)	(1)3919091 3918321 3921776	NA	NA
B5.9-190 (1261)	190 @ 2500	89 (75)	(1)3919092 3919090 3921777	NA	NA
B5.9-190 (1582)	190 @ 2500	89 (75)	(1)3919092 3919090 3921777	NA	NA

Revisions: