## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-84

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
PCE0505FAAX (413B)	8.3	(505)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0505FAB0 (413C)	8.3	(505)	Smoke Puff Limiter Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

The certification emission standards for these engine families 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	0.25

The certification emission values for these engine families in grams per brake-horsepower-hour are as follows:

Engine <u>Family</u>	Total <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
PCE0505FAAX (413B)	0.3	1.3	4.3	0.24
PCE0505FAB0 (413C)	0.5	1.5	4.4	0.25

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.)

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 20

day of September, 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 413B PCE0505FAAX Liter (CID) 8.3 (505) Fuel Type Diesel Engine Config. 1-6 Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC. CAC) (Use abbreviations per SAE J1930 May91) ECM/PCM Part.Trap/ Fuel Pump Rated HP Fuel Rate Engine Model @ Rated HP Catalyst & Injector(1) P/N (Eng. Code) @ RPM P/N mm^3 /stroke P/N (lbs/hr) NA NA 300 @ 2000 151 (111.7) (1)3920140 C8.3-300 (1406)3916626 3921770 NA 148 (99.6) NA (1)3919058 C8.3-275 275 @ 2000 (1262)3916627 3916628 3916629 3917089 3921771 3921772 3921773 3921775 3921970 C8.3-275 275 @ 1800 163 (99.0) (1)SAME NA NA SAME (1262)NA NA C8.3-250 250 @ 2400 125 (101.2) (1) SAME (1262)SAME C8.3-250 250 @ 2300 125 (97.0) (1)SAME NA NA SAME (1262)NA C8.3-250 250 @ 2200 127 (93.9) (1) SAME NA (1262)SAME C8.3-210 210 @ 2400 102 (82.8) (1)3919058 NA NA 3917088 (1263)3921774

Revisions:

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

Manufacturer Cummins Engine Company, Inc. Engine Family 413C PCE0505FABO						
Liter (CID) 8.3 (505) Fuel Type Diesel Engine Config. 1-6						
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)	& Injector(1)	ECM/PCM P/N	Part.Trap/ Catalyst P/N	
C8.3-225 (1439)	225 @ 2200	115 (85.4)	(1)3921421 3921971 3921972	NA	NA	
C8.3-210	210 @ 2200	103 (76.7)	(1)SAME SAME	NA ,	NA	

Revisions: