

State of California  
AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-90

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

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
PCE0611FZAX (343D)	10.0	(611)	Powertrain Control Module Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

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

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

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

<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PCE0611FZAX (343D)	0.2	3.2	5.0	0.18

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 15<sup>th</sup> 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 343D PCE0611FZAX  
Liter (CID) 10 (611) Fuel Type Diesel Engine Config. I-6  
Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) PCM (TC, CAC)  
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Advertised HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> /stroke (lbs/hr)	Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
L10-330E (1587)	330 @ 1600	198 (107)	3073996 3081318	3619037 3618046	NA
L10-310E (1589)	310 @ 1600	189 (102)	Same	3619037 3618046	NA
L10-280E (1642)	280 @ 1600	171 (92)	Same	3619037	NA

Revisions:  
(1) 2-343D-93

SUBMITTED  
OCT 16 1992