

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-38  
Relating to Certification of New Motor Vehicle Heavy-Duty 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. 1987 model-year diesel-powered engines have shown compliance with the transient test procedure and standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
412 (HCE0505EPA7)	505 (8.3)	Smoke Puff Limiter (Turbocharger) (Diesel Injection - Direct)

Engine models and codes are listed on attachments.

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

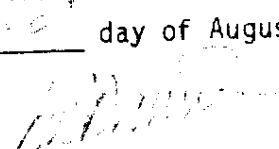
<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
412 (HCE0505EPA7)	0.8	4.6	0.5

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 (Title 13, California Administrative Code, 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.

Executed at El Monte, California this 25 day of August, 1986.

  
K. D. Drachand, Chief  
Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 412 (HCE0505EPA7)  
 Litre (CID) 8.3 (505) Eng. Type Inline 6  
 Emission Control Sys. and (Special Features) LDA (Turbocharged, DID)

Engine Model	Fuel Injection Pump Mfr Part Number	Injector Mfr. Part Number	Maximum Rate HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)
6CT8.3 CPL 0819	Robert Bosch 3911352	Robert Bosch 3911350	210 @ 2200	110.9 (82.3)	605 @ 1500	121.4 (61.4)

Date of Issue \_\_\_\_\_ Revisions: \_\_\_\_\_