

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-52
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. 1989 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KCE0505EAA1 (412)	8.3 (505)	Smoke Puff Limiter (Diesel Injection - Direct) (Turbocharger)
KCE0505FAA4 (413)	8.3 (505)	Smoke Puff Limiter (Diesel Injection - Direct) (Turbocharger) (Intercooler)

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families, except that compliance with the carbon monoxide emission standard has been demonstrated pursuant to the Code of Federal Regulations, Title 40, Part 85, Subpart A, Section 86.088-23(c)(2)(1):

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
KCE0505EAA1	0.5	4.6	0.46
KCE0505FAA4	0.6	5.3	0.46

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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 and attachments.

Executed at El Monte, California this 24th day of September, 1988.



K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family KCE0505EAA1 (412)
Liter (CID) 8.3 (505) Eng. Type Inline 6
Emission Control Sys. and (Special Features) SPL (DID, TC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
6CT8.3 CPL0819	Robert Bosch 3911352 3012645 3014299	Robert Bosch 3911350	210@2200	116.6(86.5)	605@1500	126.7(64.1)

Date of Issue _____ Revisions: _____

030186

SUBMITTED SEP 08 1988

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family KCE0505FAA4 (413)
 Liter (CID) 8.3 (505) Eng. Type Inline 6
 Emission Control Sys. and (Special Features) SPL (DID, TC, IC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
6CTA8.3 CPL-0893	Robert Bosch 3910063 3915168	Robert Bosch 3908513	250@2200	130.2(96.6)	728@1500	148.9(75.3)
	3915581 3912640	3908513	235@2100	125.7(89.0)	658@1500	131.5(66.5)
	3915907 3908567	3908513	240@2200	125.1(92.8)	645@1500	133.4(67.5)

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