

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-58  
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. 1990 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</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
LCE0505FAB4 (413A)	8.3	(505)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family:

<u>Hydrocarbons</u> <u>gm/bhp-hr</u>	<u>Carbon Monoxide</u> <u>gm/bhp-hr</u>	<u>Nitrogen Oxides</u> <u>gm/bhp-hr</u>	<u>Particulates</u> <u>gm/bhp-hr</u>
1.3	15.5	6.0	0.6

The following are the certification emission values for this engine family, 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</u> <u>gm/bhp-hr</u>	<u>Nitrogen Oxides</u> <u>gm/bhp-hr</u>	<u>Particulates</u> <u>gm/bhp-hr</u>
LCE0505FAB4 (413A)	0.5	3.7	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 and attachments.

Executed at El Monte, California this 7<sup>th</sup> day of December, 1989.

*K. D. Drachand*  
for K. D. Drachand, Chief  
Mobile Source Division

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family LCE0505FAB4 (413A)  
 Liter (CID) 8.3 (505) Eng. Type Inline 6  
 Emission Control Sys. and (Special Features) SPL (TC, IC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated 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)
6CTA8.3 CPL0982	Robert Bosch 3914125	Robert Bosch 3908513	250@2200	121.6(90.2)	775@1300	144.2(63.2)
	3913639	3908513	240@2200	116.7(86.6)	775@1300	144.2(63.2)
CPL1290	3916626	3917702	285@2400	143.1(115.8)	820@1300	155.3(68.1)
	3916630	3917702	225@2400	117.2 (94.9)	675@1300	131.3(57.5)

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

030186

SUBMITTED  
 OCT 12 1989