

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-220

Relating to Certification of New Heavy-Duty Motor Vehicles

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101 and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1998 model diesel-derived engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG)

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
WCEXH0505CAJ (553F)	8.3	505	Oxidation Catalytic Converter Engine Control Module Heated Oxygen Sensor Turbocharger Charge Air Cooler

The engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour (Title 13, California Code of Regulations, Section 1956.8(a)(1)):

<u>Non-methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.2	15.5	2.5	0.05

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

<u>Non-methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
0.2	0.6	1.7	0.01

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 2036(d)).

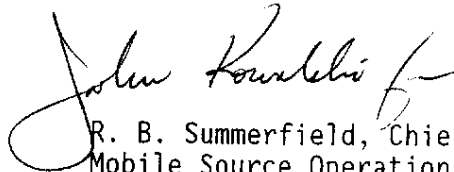
BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional lower emission standard for nitrogen oxides listed at Title 13, California Code of Regulations, Section 1956.8(a)(1).

BE IT FURTHER RESOLVED: That the listed engine models are certified for use in urban buses.

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 19<sup>th</sup> day of October, 1998.



R. B. Summerfield, Chief  
Mobile Source Operations Division

# LARGE ENGINE MODEL SUMMARY

10/15/98

Manufacturer: Cummins Engine Company Process Code: New Submission

EPA Engine Family: WCXEH0505CAJ Manufacturer Family Name: 553F

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /stroke @ peak HP	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SAE Gross)	7. Fuel Rate: mm <sup>3</sup> /stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
CPL 2290	C8.3-275G	275 @ 2400	na	na	750 @ 1400	na	na	OC, ECM-HO2S, TC-CAC
FR 90304								
CPL 2466	C8.3-250G	250 @ 2400	na	na	750 @ 1400	na	na	OC, ECM-HO2S, TC-CAC
FR 90270		250 @ 2400	na	na	660 @ 1400	na	na	OC, ECM-HO2S, TC-CAC
FR 90271								

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