

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-173

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-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1997 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
VCE661FJDABA (353H)	10.8	661	Charge Air Cooler Turbocharger Powertrain Control Module Oxidation Catalytic Converter

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:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	4.0	0.05

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

<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
VCE661FJDABA (353H)	0.2	0.5	4.0	0.04

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.).

BE IT FURTHER RESOLVED: That the listed engine models are certified for used 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 23rd day of December 1996.



R. B. Summerfield, Chief
Mobile Source Operations Division

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family (353H) VCE661FJDABA
 Displacement: / 10.8 Liters / 661 Cubic Inches
 Maximum Rated Power: 330 HP @ 2000 RPM Engine Configuration: I-6
 Ignition: Compression X Compression with Glow Plug Spark
 Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Diesel X M100 MB5
 CNG LNG LPG Other (specify)
 Diesel Cert Fuel: 13 CCR 2282 X 40 CFR 86.1313-90 40 CFR 86.1313-94
 Primary Intended Service Class: LHD MHD HHD Urban Bus X
 Exhaust ECS (include.MFI, TC, CAC): Pcm, OC (TC, CAC)
 (use abbreviations per SAE J1930 SEP91)

Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm3 / stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
M11-330E+ (2141)	330 @ 2000	169 (114)	3095731	3096662	N/A	3926265
M11-280E+ (2141)	280 @ 2000	139 (94)	3095731	3096662	N/A	3926265

Date Issued

Revisions:

SUBMITTED
OCT 04 1995