

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-188

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</u>	<u>(Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
VCE359D6DAAA (403G)	5.9	359	Charge Air Cooler Turbocharger 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	5.0	0.10

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>
VCE359D6DAAA (403G)	0.3	1.7	4.8	0.07

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.).

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EXECUTIVE ORDER A-21-188  
(Page 2 of 2)

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 9<sup>th</sup> day of January 1997.



for 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 (403G)VCE359D6DAAA  
 Displacement:  / 5.9 Liters  / 359 Cubic Inches  
 Maximum Rated Power: 175 HP @ 2500 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   M85    
 CNG   LNG   LPG   Other (specify)    
 Diesel Cert Fuel: 13 CCR 2282   40 CFR 86.1313-90   40 CFR 86.1313-94 X  
 Primary Intended Service Class: LHD   MHD X HHD   Urban Bus    
 Exhaust ECS (include MFI, TC, CAC): OC (TC, CAC)  
 (use abbreviations per SAE J1930 SEP91)

Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> / stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
B5.9-160 (1959)	160 @ 2500	75 (63)	FP:3921918 IN:3926817 IN:3922521	N/A	N/A	3926233 3929433 3932434
B5.9-175 (1550)	175 @ 2500	83 (70)	FP:3921920 IN:3926818 IN:3922518 FP:3928146	N/A	N/A	3926233 3929433 3932434

Date Issued:

Revisions:

SUBMITTED  
NOV 22 1996