

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-66-1
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. 1991 model-year diesel engine family is 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 and Special Features</u>
MCE0359FABX (403B)	5.9 (359)	Smoke Puff Limiter Charge Air Cooler Turbocharger

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Average Particulates gm/bhp-hr</u>
1.3	15.5	5.0	0.25

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

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates Designated gm/bhp-hr</u>	<u>Particulates Certification gm/bhp-hr</u>
MCE0359FABX (403B)	0.2	1.0	4.2	0.20	0.20

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.)

BE IT FURTHER RESOLVED: That this engine is included in a diesel heavy-duty particulate averaging program as permitted in "California Exhaust Emission Standards for 1985 Subsequent Model Heavy-Duty Diesel Engines and Vehicles, Amended May 15, 1990", referenced section 86.091-11(a)(1)(iv)(C).

Engine 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 18th day of June, 1991.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (403B) MCE0359FABXLiter (CID) 5.9 (359) Eng. Type I-6Emission Control Sys. & Special Features SPL (TC, CAC)
(Use abbreviations per SAE J1930 Jun88)

Engine Model (Eng. Code)	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Particulate Trap Mfr. Part Number
B5.9-230 (0987)	Robert Bosch 3913440	Robert Bosch 3919091	230 @ 2500	104.0	NA
B5.9-210 (1422)	Robert Bosch 3918321	Robert Bosch 3919091	210 @ 2500	96.0	NA
B5.9-190 (1261)	Robert Bosch 3919090	Robert Bosch 3919092	190 @ 2500	89.0	NA

Revisions:

031390

030186