

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-78

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. 1992 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

| <u>Engine Family</u> | <u>Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems and Special Features</u> |
|-----------------------|------------------------------|--|
| NCE0505FAB2 (413C) | 8.3 (505) | Smoke Puff Limiter Turbocharger Charge Air Cooler |
| NCE0359FACX (403C) | 5.9 (359) | Smoke Puff Limiter Turbocharger Charge Air Cooler |

Engine models and codes are listed on attachments.

The certification emission standards for these engine families in grams per brake-horsepower-hour are as follows:

| <u>Total Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|---------------------------|------------------------|------------------------|---------------------|
| 1.3 | 15.5 | 5.0 | 0.25 |

The certification emission values for these engine families in grams per brake-horsepower-hour are as follows:


| <u>Engine Family</u> | <u>Total Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|-----------------------|---------------------------|------------------------|------------------------|---------------------|
| NCE0505FAB2 (413C) | 0.5 | 1.5 | 4.4 | 0.25 |
| NCE0359FACX (403C) | 0.3 | 2.1 | 4.9 | 0.23 |

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.)

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 15th day of April, 1992.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1992 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (413C) NCE0505FAB2Liter (CID) 8.3 (505) 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 |
|-----------------------------|--|---------------------------------|--------------------------------|--|---|
|-----------------------------|--|---------------------------------|--------------------------------|--|---|

| | | | | | |
|--------------------|-------------------------|-------------------------|----------|-----|----|
| C8.3-225 (1439) | Robert Bosch 3921971 | Robert Bosch 3921421 | 225@2200 | 115 | NA |
|--------------------|-------------------------|-------------------------|----------|-----|----|

| | | | | | |
|--------------------|-------------------------|-------------------------|----------|-----|----|
| C8.3-210 (1439) | Robert Bosch 3921972 | Robert Bosch 3921421 | 210@2200 | 103 | NA |
|--------------------|-------------------------|-------------------------|----------|-----|----|

Revisions:

031390

030186

SUBMITTED
MAR 2 1992

1992 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (403C) NCE0359FACXLiter (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 |
|-----------------------------|--|---------------------------------|--------------------------------|--|---|
| B5.9-175 (1527) | Robert Bosch 3921837 | Robert Bosch 3919092 | 175 @ 2500 | 81.0 | NA |

Revisions:
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