State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-61 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. 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

| Engine Family | | cement bic Inches) | Exhaust Emission Control Systems (Special Features) |
|--------------------|------|-----------------------|---|
| LCE0855FAB3 (0930) |) 14 | (855) | Smoke Puff Limiter (Turbocharger) (Charge Air Cooler) |
| LCE0611FABX (343F) |) 10 | (611) | Smoke Puff Limiter (Turbocharger) (Charge Air Cooler) |

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

| Hydrocarbons gm/bhp-hr | Carbon Monoxide gm/bhp-hr | Nitrogen Oxides gm/bhp-hr | Particulates gm/bhp-hr |
|---------------------------|---------------------------------|------------------------------|---------------------------|
| 1.3 | 15.5 | 6.0 | 0.60 |

The following are the certification emission values for these engine families, except that compliance with the carbon monoxide emission standard has been demonstrated pursuant to the Code of Federal Regulations, Title 40, Part 85, Subpart A, Section 86.088-23(c)(2)(1):

| Engine Family | Hydrocarbons _gm/bhp-hr | Nitrogen Oxides gm/bhp-hr | Particulates <u>gm/bhp-hr</u> |
|--------------------|----------------------------|------------------------------|----------------------------------|
| LCE0855FAB3 (0930) | 0.4 | 5.1 | 0.40 |
| LCE0611FABX (343F) | 0.7 | 4.6 | 0.45 |

BE IT FURTHER RESOLVED: That the listed engines, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (California Health and Safety Code Section 43205.5).

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 1972 day of July, 1990.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer Cummins Engine Company, Inc. Engine Family LCE0611FABX (343F) | | | | | | FABX (343F) | |
|--|--|----------------------------------|-------------------------------|--|--------------------------------------|--|--|
| Liter (| CID)10 | (611) | Eng. 7 | TypeIn | line 6 | | |
| Emission | Control Sys | and (Special | . Features) | SP | SPL (TC. IC) | | |
| Engine Model | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP at RPM | Fuel Rate mm ³ /stroke (1bs/Hr) | Maximum Rated Torque at RPM | Fuel Rate mm ³ /stroke (lbs/Hr) | |
| LTA10 CPL 1226 | Same | Cummins 3056342 (1)3069759 | 270@2100 240@2100 | 130 (92) 117 (83) | 860@1300 870@1300 | 167 (73) 169 (74) | |

| Nate | ٥f | Issue | Revisions: | 1) | 8-11-89 |
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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer Cummins Engine Company, Inc. Engine Family LCE0855FAB3 (0930) Liter (CID) 14 (855) Eng. Type Inline 6 Emission Control Sys. and (Special Features) SPL (TC, IC) | | | | | | | |
|--|-----------------------|--------------------|----------|----------|-----------|----------|--|
| | | | | | | | |
| Fleet 36 CPL1352 | 00 Cummins 3070315 | Cummins 3071047 | 300@1700 | 171 (98) | 1150@1100 | 212 (79) | |
| Date of | Issue | | Revis | ions: | | | |