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State 7 Call form a AIR & OBREE BOAD

EXECUTIVE ORDER A-21-195

Relating to Certification of New Medium-Duty Motor Hand De Engines

CUMMINS E INE COMPANY, INC.

Pursuant to the authority vested in the main 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 Sufery Code and Subtraction of Code and Subtraction of Code and Section 2005

IT IS ORDERED AND RESOLVED: That the following 1998 model-year Cummins Engine Company, Inc. diesel-cycle engines are certified for medium-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) of 8,501 to 14,000 pounds.

Fuel Type: Diesel

| Engine Family | | Displacemu (Cubic Enches) | Exhaust Emission Control Systems and Special Features |
|------------------------|-----|------------------------------|---|
| WCEXA03598AH (403%) | 5.9 | (359) | Turbocharger Chinge Ath Costan Powerthase Conumble Module |

Engine models and codes are listed on attachments.

The certification exhaust emission standards for this engine for λ_1 in graph brake horsepower-kour are:

| Non-Methane Eydrocarbons Nitrogen Oxides | Carbon <u>Monoxide</u> | <u>Particulates</u> |
|--|---------------------------|---------------------|
| 3 .9 | 14.4 | 0.10 |

The certification akhaust emission times for this engine family in grams per brake horsepower-hour are:

| Non-Mathare Hydrocarbons + <u>Altrogen Oxides</u> | Carbon <u>Monoxide</u> | <u>Particulates</u> |
|--|---------------------------|---------------------|
| 3.8 | 0.9 | 0.10 |

BE IT FURTHER RESOLVED: That, the see engine models are certified to the optional standards and test procedures applicable to incomplete and diesel medium-duty vehicles of 8,501 to 14,000 pounds GVWR pursuant to Title 13, California Code of Regulations, Section 1956.8(g).

CUMMINS ENGINE COMPANY, INC.

EXECUTIVE ORDER A-21-195 (Page 2 of 2)

BE IT FURTHER RESILVED: That the sted engine models and vehicle models shall be subject to the in-use compliance provision applicable to 1995 and subsequent model-year medium-duty vehicles, set forth in Title 13, California Code of Regulations, Section 2139(c).

BE IT FURTHER RESOLVED: That the listed engine models also comply and the "California Motor Vehicle Emissic Control and Smog Index Labe: Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models also comply with the Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Tiagnostic System Requirements--1994 and Subsequent Normal Land Passenger Call Light Staty Trucks and Medium-Duty Vehicles and Engines").

ELIT 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 15, 62/19prata Code 2, Regulations, Section 2035 et seq.

Vehicle certified under this Exe $-i\nu$ are m must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executes at El Monte, California thus 100

of Hovember 1997.

R. B. Summerfield, Chief

Mohits Source Operations Division

R 21-195 9/25/97

Manufacturer: Cummins Engine Company, Inc.

Process Code: New Submission.

LARGE ENGINE MOL 3L SUMMARY

| | 9. Emission Control evice Per SAE J1930 | PCM, TC, CAC | PCM, TC, CAC |
|---------------------------------|--|---------------------------------------|--------------|
| | 9.Eml | S S | Pos |
| • | 8.Fuel Rate: 9.Emission Cortrol (bs/hr)@peak torque Device Per SAE J1930 | 86 46.2 | 43.6 |
| 403N | 7.Fuel Rate: mm/stroke@peak torque | 88 | 81 |
| Manufacturer I 5. Fuel Rate: | 6.Torque @ RPM (SEA Gross) | 450@1600 | 420@1600 |
| | | 83.9 456 | 79.3 |
| | 4.Fuel Bate: mm/stroke @ peak HP ((for diesel only) | 92 | <u>78</u> |
| EPA Engine Family: WCEXA0359BAH | 3.BHP@RPM (SAE Gross) | 230@2700 | 215@2700 |
| | 2.Engine Model | PL2279 FR90290 ISB 230 230@2700 92 | SB 215 |
| EPA Engine Fam | 1.Engine Code 2.Engine Model | CPL2279 FR90290 | FR90291 |

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(tbs/ht)@peak torque Device Per SAE J1930

9. Emission Control

8.Fuel Rate:

10/16/97

LARGE ENGINE MO EL SUMMARY

Manufacturer: Cummins Engine Company, Inc. ...

Process Code: Carrection.

Manufacturer Family Name:

7,Fuel Rate: mm/stroke@peak torque 6.Torque @ RPM (SEA Gross) 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 4. Fuel Rate: mrn/stroke @ peak HP (for diesel only) 3.BHP@RPM (SAE Gross) WCEXA0359BAH 2. Engine Model EPA Engine Family: 1.Engine Code

403N

460@1600

235@2700

ISB 235

CP[2279