State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-31-36

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

HINO MOTORS, LTD.

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 2000 model-year Hino Motors, Ltd. diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Engine Family	Engine Displacement Liters (Cubic Inches)		Exhaust Emission Control Systems and Special Features	
YHMXH05.3JTD	5.3	(324)	Turbocharger Charge Air Cooler Engine Control Module 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:

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	
1.3	15.5	4.0	0.10

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	
0.2	0.4	3.2	0.09

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 ______ day of December 1999.

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Mobile Source Operations Division

Engine Model Frmmary Form

E0: A-31-36

Manufacturer: Hino Motors, Ltd.

Engine category: On-highway HDDE

EPA Engine Family: YHMXH05.3JTD

Mfr Family Name:

Process Code: New Submission

(lbs/hr)@peak torque Device Per SAE J1930 TC, CAC, ECM, OC 9.Emission Control 35.9 +/- 1.0 8.Fuel Rate: 7.Fuel Rate: mm/stroke@peak 110.0 +/- 3.0 torque 6.Torque @ RPM (SEA Gross) 366@1500 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 63.1 +/- 2.2 mm/stroke @ peak HP 116.0 +/- 4.0 (for diesel only) 4.Fuel Rate: 3.BHP@RPM (SAE Gross) 168@2500 2.Engine Model J05C-TD 1.Engine Code J05C-TD