

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-31-35

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 1999 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

<u>Engine Family</u>	<u>Engine Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
XHMXH08.0JTR	5.3/8.0 (324/486)	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:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
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:

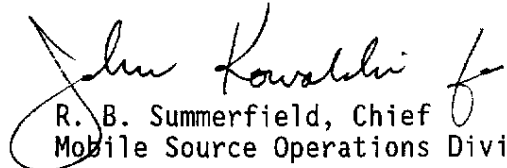
<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
0.4	1.0	3.7	0.09

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 16th day of November 1998.


R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

EO: A-31-35

Manufacturer: **Hino Motors, Ltd.**

Process Code: **New Submission**

EPA Engine Family: **XHMXH08.0JTR**

Manufacturer Family Name: **N/A**

1. Engine Code 2. Engine Model 3. BHP@RPM (SAE Gross) 4. Fuel Rate: mm/stroke @ peak HP (for diesel only) 5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 6. Torque @ RPM (SEA Gross) 7. Fuel Rate: mm/stroke@peak torque 8. Fuel Rate: (lbs/hr)@peak torque 9. Emission Control Device Per SAE J1930

J05C-TD	J05C-TD	168@2500	116.0A)4.0	63.1A)2.2	366@1500	110.0A)3.0	35.9A)1.0	TC,CAC,ECM,OC
J08C-TP	J08C-TP	200@2500	92.0A)4.0	75.1A)3.3	456@1500	94.0A)3.0	46.0A)1.5	TC,CAC,ECM,OC
J08C-TU	J08C-TU	217@2500	103.0A)4.0	84.1A)3.3	492@1500	100.0A)3.0	49.0A)1.5	TC,CAC,ECM,OC
J08C-TR	J08C-TR	252@2500	118.0A)4.0	96.3A)3.3	550@1500	110.0A)3.0	53.9A)1.5	TC,CAC,ECM,OC