State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-167

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

ISUZU MOTORS LIMITED

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 Isuzu Motors Limited 1999 model diesel 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	Liters (Cubic Inches)	Exhaust Emission Control Systems and Special Features
XSZXH04.83AA	4.8 (294)	Charge Air Cooler Turbocharger Exhaust Gas Recirculation 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	
0.4	2.0	3.8	0.08

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

of February 1998.

R. B. Summerfield, Chief Mobile Source Operations Division

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LARGE ENGINE MODEL SUMMARY

Manufacturer: Isuzu Motors Limited

Process Code: New Submission

Fuel Rate. Fuel Rate:
mnr/stroke@peak (lbs/hr)@peak torque Envssion Control
10/que
10/que
Torque
Torque
Torque
Torque
Torque 43.2@2000 73.5@1200 97.1@2000 XX Torque @ RPM (3EA Gross) 275@1200 347@2090 Manufacturer Family Name: Fuel Rate: (lbs/hr) @ peak HP 64.0@2700 Fuel Rate: mm/stroke @ peak TiP რი თხარიის 89.5@2800 106.7@2700 BHP@RPM (SAE Gross) 175HP@2700 142HP@2800 EPA Engine Family: XSZXH04.83AA Engine Model 4HE1XN 4HE1XS

Engine Code 483AA-1 433AA-2

DFI.EGR.CAC.TC, OC.