

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-183

Relating to Certification of New Heavy-Duty Engines and Vehicles

ISUZU MOTORS, LTD.

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

IT IS ORDERED AND RESOLVED: That the following 2001 model-year Isuzu Motors, Ltd. 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

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
1SZXH04.83AA	4.8	294	Turbocharger Charge Air Cooler Electronic Control Module Oxidation Catalytic Converter Exhaust Gas Recirculation

The engine models and codes are listed on attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP") for Heavy-Duty Diesel Engines (Title 13, California Code of Regulations, Section 1956.8):

	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
"FTP"	1.3	15.5	4.0	0.10

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

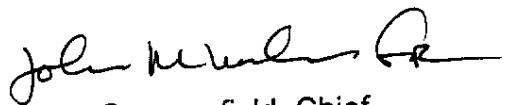
	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
"FTP"	0.4	1.7	3.8	0.08

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, Sections 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 12th day of January 2000.


R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

ED: A-20-183

Manufacturer: **Isuzu Motors Limited**
 Engine category: **On-highway HDDE**
 EPA Engine Family: **1SZXH04.83AA**
 Mir Family Name: **N/A**
 Process Code: **New Submission**

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm ³ /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 ³ /stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
483AA-3	4HE1XN	142HP@2800	89.5@2800	55.7@2800	275@1200	73.5@1200	19.8@1200	DFI,EGR,CAC,TC,
483AA-4	4HE1XS	175HP@2700	106.7@2700	64.0@2700	347@2000	97.1@2000	43.2@2000	DFI,EGR,CAC,TC, OC

OC, TC, CAC, ECM, EGR