

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-176  
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;

IT IS ORDERED AND RESOLVED: That the following 2000 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>	
YSZXH04.83AA	4.8	<del>293</del>	Turbocharger Charge Air Cooler Electronic Control Module Oxidation Catalytic Converter Exhaust Gas Recirculation

The 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 (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>
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:

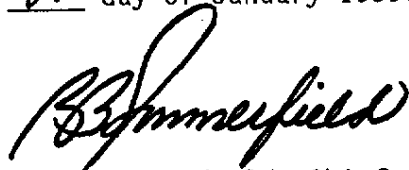
<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
0.4	2.0	3.8	0.08

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, 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 21<sup>st</sup> day of January 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division

# LARGE ENGINE MODEL SUMMARY

1/19/99

Manufacturer: Isuzu Motors Ltd.

Process Code: New Submission

EPA Engine Family: YSZXH04.83AA

Manufacturer Family Name:

1. Engine Code      2. Engine Model      3. BHP@RPM  
(SAE Gross)

4. Fuel Rate:  
mm<sup>3</sup>/stroke @ peak  
HP

5. Fuel Rate:  
(lbs/hr) @ peak HP  
(for diesels only)

6. Torque @ RPM  
(SAE Gross)

7. Fuel Rate:  
mm<sup>3</sup>/stroke@peak  
torque

8. Fuel Rate:  
(lbs/hr)@peak  
torque

9. Emission Control  
Device Per SAE J1930

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /stroke @ peak HP	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SAE Gross)	7. Fuel Rate: mm <sup>3</sup> /stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
483AA-1	4HE1XN	137@2800	89.5	55.7	268@1200			ECM,TC,CAC,EGR,OC
483AA-2	4HE1XS	169@2700	106.7	64.0	339@2000			ECM,TC,CAC,EGR,OC

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