State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-158

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 1997 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
VSZ7.1D6DAAW	7.1 (435)	Charge Air Cooler Turbocharger 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 Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
1.3	15.5	5.0	0.10

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

Engine Family	Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
VSZ7.1D6DAAW	0.3	2.1	4.3	0.07

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 9th day of September 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O. # A-20-158

1997 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer ISUZU MOTORS LIMITED Engine Family VSZ7.1D6DAAW

Displacement : 7.1 / Liters 435 / Cubic Inches

All Eng Codes in Eng Family : CA__ 49S__ 50S X Strokes/Cycle : 4 Valve /Cylinder : 2

Ignition : Compression ____ Compression with Glow Plug X Spark ____

Fuel Type(s) : Dedicated X Flex-Fuel __ Dual-Fuel __ Bi-Fuel __ Diesel X CNG __

LNG __ LPG __ M85 __ M100 __ Other (specify) ____

Diesel Cert Fuel : 13 CCR 2282 ____ 40 CFR 86.1313-90 ____ 40 CFR 86.1313-94 X

Maximum Rated Power : 197 / 227 HP @ 2500 / 2500 RPM Engine configuration : I-6

Exhaust ECS (e.g., OC, EGR, PTOX, IFI, TC, CAC) : ECM, OC, CAC, TC
(use abbreviations per SAE J1930 SEP 91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³ / stroke (lbs / hr)	Fuel Pump & Injector Part No.	ECM / PCM Part No.	EGR Valve Part No.	PTOX / Catalyst Converter Part No.
6HE1XN (71DAW-5)	197 HP 2500 RPM	94.3 mm³ / stroke (78.6 lb/hr)	Fuel Pump 8943957912 8943957922 Injector 8943946064	1815106570	N/A	8943956200
6HE1XS (71DAW-6)	227 HP 2500 RPM	108.9 mm³ / stroke (90.7 lb/hr)	Fuel Pump 8943957902 Injector 8943946064	1815106580	N/A	8943956200

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