## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-20-151

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
VSZ7.1D6DAAA	7.1	(435)	Engine Control Module Oxidation Catalytic Converter Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

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

Total	Carbon	Nitrogen	<u>Particulates</u>	
Hydrocarbons	<u>Monoxide</u>	Oxides		
1.3	15.5	5.0	0.10	

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

Engine	Total	Carbon	Nitrogen	<u>Particulates</u>
Family	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
VSZ7.1D6DAAA	0.5	2.8	4.7	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 18 day of January 1996.

A. B. Summerfield

Assistant Division Chief Mobile Source Division

E.O.#	A-20-151
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1997	MODEL	-YEAR	AIR	RES	OURCES	BOARD	SUPPLEMENTAL	. DATA	SHEET
_		HEA\	/Y-Dl	JΤΥ	DIESEL-	-STANDA	ARD ENGINES		

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Manufacturer	urer ISUZU MOTORS		LIMITED Engine Fam		1y	VSZ7.1D6DAAA	
Displacement:	7.1	/	_Liters _	435		Cubic Inches	
All Eng Codes	in Eng Fami	ly: CA 49S_	50S <u>X</u>	Strokes	/Cycle: <u>4</u>	Valves/Cylinder: 2	
Ignition: Com	pression	Cc	ompression wi	ith Glow	Plug <u>X</u>	Spark	
<pre>Fuel Type(s):</pre>	Dedicated_	★ Flex-Fuel	Dual-Fu	uel	Bi-Fuel	Diesel <u>X</u> CNG	
	LNGL	.PG M85	M100	Other (	specify)		
Diesel Cert Fu	el: 13 CCF	2282	40 CFR 86.	1313-90	40	CFR 86.1313-94 X	
Maximum Rated	Power:19	07/227 HP @ _	2500 / 2500	RPM	Engine con	ifiguration: <u>I-6</u>	
Exhaust ECS (e	e.g., OC, EG	GR, PTOX, IFI,	TC, CAC):		ECM, OC, C	CAC, TC	
			(1	use abbre	viations pe	er SAE J1930 SEP91)	

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³/stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/ <del>PCM</del> Part No.	EGR Valve Part No.	PTOX / Catalyst Converter Part No.
6HE1XN (71DAA-3)	197 HP 2500 RPM	94.3 mm³/stroke (78.6 lb/hr)	Fuel Pump 8943954952 8943954962 8943903752 Injector 8943946064	1815106570	N/A	8943943902
6HE1XN (71DAA-5)	197 HP 2500 RPM	94.3 mm³/stroke (78.6 lb/hr)	Fuel Pump 8943957912 8943957922 Injector 8943946064	1815106570	N/A	8943956200
6HE1XS (71DAA-6)	227 HP 2500 RPM	108.9 mm³/stroke (90.7 lb/hr)	Fuel Pump 8943957902 Injector 8943946064	1815106580	N/A	8943956200

Date Issued: Oct. 2, 1995

Revisions: 97H-01