State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-144

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 1996 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

<u>Fuel Type</u>: Diesel

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TSZ7.1D6DAAA	7.1	435	Charge Air Cooler Turbocharger Oxidation Catalytic Converter Engine Control Module

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:

<u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
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 <u>Family</u>	<u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen _Oxides_	<u>Particulates</u>
TSZ7.1D6DAAA	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 194 day of July 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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	199 <u>5</u> AI	R RESOURCES BOA HEAVY-DUTY DIES	RD SUPPLEMENTA EL-STANDARD EN	L DATA SHEET GINES	Page	≥ 1 of 1
Manufacturer		MOTORS LIMITED				
Displacement:	7.1	/	Liters	435 /	1327	Cubic Inche
Maximum Rated	Power: 19	7/227 HP @	2500 / 2500 R	PM Engine	configurat	_ cubic inche
Ignition: Com	pression	Co	mpression with	Glow Plug	X	Spark
<pre>Fuel Type(s):</pre>	Dedicated_	Flex-Fuel_	Dual-Fue	l Diese	<u>∵</u> - 1 X M10	10 M85
	CNGLN	G LPG	— Other (speci	<u></u> fy)	·	, , , , , , , , , , , , , , , , , , ,
Diesel Cert Fu	iel: 13 CCR	2282	40 CFR 86.131	3-90	40 CFR 86.	.1313-94 X
Primary Intend	led Service (Class: LHD_	MHD :	X HHD	Urt	oan Bus
Exhaust ECS (i	ncl. MFI; To	C, CAC):		ECM, OC, CAC,	TC	
		-	(use abbrevi	ations per SA	E J1930 SEF	91)
Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³/stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/ PCM	Valve	PTOX / Catalyst Converter Part No.
6HE1XN (71DAA-3)	197 HP 2500 RPM	94.3 mm³/stroke (78.6 lb/hr)	Fuel Pump 8943954950 8943954960 Injector 89 4 3946064	1815106570	N/A	
6HE1XS (71DAA-4)	227 HP 2500 RPM	108.9 mm³/stroke (90.7 lb/hr)	Fuel Pump 8943954940 Injector 8943946064	1815106580	_ N/A	8943943902
Date Issued:	Fob. 2 1005		-			
Revisions:						
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