

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-171
Relating to Certification of New Motor Vehicles

ISUZU MOTORS LIMITED

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

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

IT IS ORDERED AND RESOLVED: That 1999 model-year Isuzu Motors Limited exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: XSZXT03.22JK Displacement: 3.2 Liters (193 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

- Dual Three Way Catalytic Converters
- Dual Heated Oxygen Sensors (two)
- Exhaust Gas Recirculation
- Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) LEV certification exhaust emission standards for this engine family in grams per mile are:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.100	4.4	0.4	0.018	12.5
	100,000	0.130	5.5	0.5	0.023	n/a

Reactivity Adjustment factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for NMOG reflect application of a 0.94 RAF for 1999 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.069	1.0	0.3	0.0001	8.3
	100,000	0.072	1.2	0.3	0.0001	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves 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.).

Vehicles 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 attachment.

Executed at El Monte, California this 11th day of June 1998.



R. B. Summerfield, Chief
Mobile Source Operations Division

**1999 MODEL - YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT - DUTY TRUCKS AND MEDIUM - DUTY VEHICLES**

Manufacturer: ISUZU MOTORS LIMITED Exh Eng Fam: XSZXT03.22JK Evap. Fam: XSZXT0095MEO
 All Engine Codes in Engine Family: CA X 49S 50S ~~AB965~~ ORVR: Yes No X
 Exh. Std: CA Tier-1 TLEV LEV X ULEV SULEV ; US EPA NLEV X
 Veh Class(es): PC LDT 1 LDT 2 X MDV1 MDV2 MDV3 MDV4 MDV5
 Signal Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)
 Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Gasoline X Diesel
 CNG LNG LPG M85 Other (specify)
 Exh. Emiss Test Fuel(s): Indo CBG X CNG LPG M85 Other (specify)
 Diesel: 13 CCR 2282 40 CFR 86.113- 90 40 CFR 86.113- 94
 Evaporative Emission Test Procedure: California Federal X
 Service Accum: Std AMA X Mod AMA Mfr ADP Other (specify)
 NMOG Test Procedure: N/A Std X Equiv R/L Test Proc: SHED Pt Source X
 Engine Configuration: V6 Displacement: 3.2 / Liters 193 / Cubic inches
 Valve per Cylinder: 4 Rated HP: 205 @ 5400 RPM
 Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT X
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI, EGR, 2TWC, 2HO2S (2)
 (use abbreviations per SAE J1930 JUN 93)

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM / PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
322J- 1	XM - R1A YM - R1A XM - R1B YM - R1B XM - R1C YM - R1C	A4	4000	15.4	PCM 8093649590	8170961782	TWC 8253145870
	XM - S1B YM - S1B XM - S1C YM - S1C		4250				

XM - R1A : RODEO 2WD, Long Wheelbase, P215 tire
 XM - R1B : RODEO 2WD, Long Wheelbase, P235 tire
 XM - R1C : RODEO 2WD, Long Wheelbase, P245 tire
 XM - S1B : RODEO 4WD, Long Wheelbase, P235 tire
 XM - S1C : RODEO 4WD, Long Wheelbase, P245 tire
 YM - R1A : HONDA PASSPORT 2WD, Long Wheelbase, P215 tire
 YM - R1B : HONDA PASSPORT 2WD, Long Wheelbase, P235 tire
 YM - R1C : HONDA PASSPORT 2WD, Long Wheelbase, P245 tire
 YM - S1B : HONDA PASSPORT 4WD, Long Wheelbase, P235 tire
 YM - S1C : HONDA PASSPORT 4WD, Long Wheelbase, P245 tire

**1999 MODEL - YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT - DUTY TRUCKS AND MEDIUM - DUTY VEHICLES**

Manufacturer : ISUZU MOTORS LIMITED Exh Eng Fam : XSZXT03.22JK Evap. Fam : XSZXT0095PE0
 All Engine Codes in Engine Family : CAX 49S 50S ~~AB965~~ , ORVR : Yes No x
 Exh. Std : CA Tier-1 TLEV LEV x ULEV SULEV ; US EPA NLEV x
 Veh Class(es) : PC LDT 1 LDT 2 x MDV1 MDV2 MDV3 MDV4 MDV5
 Signal Cert Std for Multi-Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, MDV2, MDV3, MDV4)
 Fuel Type(s) : Dedicated x Flex-Fuel Dual-Fuel Bi-Fuel Gasoline x Diesel
 CNG LNG LPG M85 Other (specify)
 Exh. Emiss Test Fuel(s) : Indo CBG x CNG LPG M85 Other (specify)
 Diesel : 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94
 Evaporative Emission Test Procedure : California Federal x
 Service Accum : Std AMA x Mod AMA Mfr ADP Other (specify)
 NMOG Test Procedure : N/A Std x Equip R/L Test Proc : SHED Pt Source x
 Engine Configuration : V6 Displacement : 3.2 / Liters 193 / Cubic inches
 Valve per Cylinder : 4 Rated HP : 205 @ 5400 RPM
 Engine : Front x Mid Rear Drive : FWD RWD x 4WD-FT 4WD-PT x
 Exhaust ECS (e.g., MFI, EGR, TC, CAC) : SFI, EGR, 2TWC, 2HO2S (2)
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Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM / PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
322J- 1	WM - R3B WM - R3C	A4	3750	15.4	PCM 8093649590	8170961782	TWC 8253145870
	WM - R2B WM - R2C		3875				
	WM - S2B WM - S2C WM - S3B WM - S3C		4000				

WM - R2B : AMIGO 2WD, Short Wheelbase, Resin Top, P235 tire
 WM - R2C : AMIGO 2WD, Short Wheelbase, Resin Top, P245 tire
 WM - R3B : AMIGO 2WD, Short Wheelbase, Soft Top, P235 tire
 WM - R3C : AMIGO 2WD, Short Wheelbase, Soft Top, P245 tire
 WM - S3B : AMIGO 4WD, Short Wheelbase, Soft Top, P235 tire
 WM - S3C : AMIGO 4WD, Short Wheelbase, Soft Top, P245 tire