State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-154 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 1997 model-year Isuzu Motors Limited exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: VSZ3.22JGKEK Displacement: 3.2 Liters (193 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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

The certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle		Non-Methane	Carbon	Nitrogen	Carbon
_Weight(lbs.)	Miles	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20 ⁰ F)
3751-5750	50,000	0.32	4.4	0.7	12.5
	100,000	0.40	5.5	0.97	n/a

The certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight(lbs.)	Miles	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen Oxides	Carbon <u>Monoxide (20⁰F)</u>	
3751-5750	50,000	0.13	1.1	0.4	12.1	
	100,000	0.14	1.3	0.48	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 non-methane organic gas (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 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

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 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 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 13 day of June 1996.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

E.O. # <u>A-20-154</u>

1997 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

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Manufacturer: <u>IS</u>	UZU MOTORS LIM	1ITED_	Exh Eng 1	Fam: V	SZ3.22JGKEK	Evap Fam:	VSZ1058AYMRO
All Eng Codes in	Eng Fam: CA	4	9S !	50S X	AB965		
Exh Std: CA Tie	r-1 <u>X</u> TLE	 : V	LEV	ULE	 V ZEV	· US F	PA Tier-1 X
Evap Std: 50K_X	Useful Life w	ith R/L	In-	-Use Ex	 xh Std: Full	in Use X	Alt in Use
Veh Class(es) :	PC LDT1	LDT2	X MDV:	1	MDV2 M	DV3 MDV	4 MDV5
Veh Class(es): PCLDT1LDT2_X MDV1MDV2MDV3MDV4MDV5_ Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)							
Fuel Type(s): Dedicated Flex-Fuel Dual-Fuel Bi-Fuel Gasoline_X Diesel							
CNG LNG LPG M85 Other (specify)							
Emiss Test Fuel(s): Indo X Ph2 CNG LPG M85 Other (specify)							
	Diesel: 13	CCR 2282	·· <u> </u>	40 CFF	8 86.113-90	40 CER	86 113-94
Diesel: 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94							
NMOG Test Procedu	re: N/A X	Std —	- Equiv	F	R/L Test Pro	c: SHFD	Pt Source
Hybrid: Type A	B C , AP	U Cycle (e.g., Ott	o. Die	sel. Turbin	e):	
Hybrid: Type A B C , APU Cycle (e.g., Otto, Diesel, Turbine): Engine Configuration: V6 Displacement: 3.2 / Liters 193 / Cubic Inches							
Walve per Cylinder: 4 Rated HP: 190 @ 5600 RPM							
gine: Front X	Mid Rea	ar	Drive	: FWD	RWD X	4WD_FT	AWD_DT Y
Exhaust ECS (eg., MFI, EGR, TC, CAC): Drive: FWD RWD X 4WD-FT 4WD-PT X SFI. EGR. 2TWC. 2H02S(2)							
Exhaust ECS (eg., MFI, EGR, TC, CAC): SFI, EGR, 2TWC, 2H02S(2) (use abbreviations per SAE J1930 SEP91)							
Engine Code Ve	ehicle Models	Trans	FTW	nDA	Ignition	ECD	Coholistic
Engine Code Ve (also list (i CA/49ST/50ST) a	if coded see	(M5, A4	or	or	(ECM/PCM)	System	Converter
CA/49ST/50ST) a	ittachment)	etc.)	Test WT	RLHP	Part No.	Part No.	Part No.
	UK-S1				PCM	#+ <u>-</u> -	
322KE-1		_ A	4750	15.2	8162433190		
(50ST)	ZK-S1				8162653190 8162662790	8170961780	8971208164
					0102002790		
Vehicle Model	UK-S1: TRO	OPER 4WN	. Long Wh	ee]has	<u> </u>		
 ·	ZK-S1; ACL	JRA SLX 4	WD, Long	Whee 1 b	ase		

Date Issued: May 6, 1996

Revisions: 97B-02 97B-AC-02