	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0100 New Off-Road Compression-Ignition Engines
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Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 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 compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2002	2SZXL04.3CNA	4.3	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Generator, Excavator	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):


RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	7.0	--	--	--	8	6	13

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 22nd day of October 2001.


 R. B. Summerfield, Chief
 Mobile Source Operations Division

Engine Model Summary Form

EOU-R-006-0100

ATTACHMENT

Manufacturer: **Isuzu Motors Limited**
 Engine category: **Nonroad CI**
 EPA Engine Family: **2SZXL04.3CNA**
 Mfr Family Name: **NA**
 Process Code: **New Submission**

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
4BG1NAACA-01	A-4BG1 64.5	86.8@2500	66.8@2500	37.1@2500	227.2@1600	75.7@1600	26.9@1600	EM,DP1
4BG1NAACA-02	A-4BG1	78.9@2000	70.5@2000	31.4@2000	227.2@1600	75.7@1600	26.9@1600	EM,DP1
4BG1NAACA-03	A-4BG1	77.0@2500	56.2@2500	31.2@2500	205.0@1600	63.4@1600	22.5@1600	EM,DP1
4BG1NAACA-04	A-4BG1	70.0@2000	60.6@2000	27.0@2000	205.0@1600	63.4@1600	22.5@1600	EM,DP1
4BG1NAACA-05	A-4BG1	78.8@2300	68.7@2300	35.1@2300	211.1@1600	74.3@1600	26.4@1600	EM,DP1
4BG1NAACA-06	A-4BG1	74.6@2000	67.4@2000	30.0@2000	212.9@1400	73.0@1400	22.7@1400	EM,DP1
4BG1NAACA-07	A-4BG1	81.7@2200	65.2@2200	31.9@2200	210.0@1600	70.4@1600	25.1@1600	EM,DP1
4BG1NAACA-08	A-4BG1	75.6@2300	65.2@2300	32.9@2300	293.2@1600	69.5@1600	24.7@1600	EM,DP1
4BG1NAACA-09	A-4BG1	86.4@2400	67.8@2400	36.2@2400	226.4@1500	75.7@1500	25.3@1500	EM,DP1
4BG1NAACA-10	A-4BG1	64.4@2000	61.3@2000	27.3@2000	198.3@1400	69.5@1400	21.6@1400	EM,DP1
4BG1NAACA-11	A-4BG1	80.1@2500	63.0@2500	35.0@2500	219.6@1600	72.2@1600	25.7@1600	EM,DP1
4BG1NAACB-01	B-4BG1	62.1@1750	61.4@1750	24.0@1750	194.8@1500	63.6@1500	21.2@1500	EM,DP1
4BG1NAACB-02	B-4BG1 37.7	50.6@1750	48.8@1750	19.0@1750	160.8@1500	50.5@1500	16.8@1500	EM,DP1