California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0083 New Off-Road Compression-Ignition Engines

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	2SZXL04.3BTA	4.3	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger	Loader, Compressor, 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 < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	8.9	--	--	--	16	14	23

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 19th day of November 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **Isuzu Motors Limited**

Engine category: **Nonroad CI**

EPA Engine Family: **2SZXL04.3BTA**

Mfr Family Name: **NA**

Process Code: **New Submission**

ATTACHMENT

EO U-R-006-0083

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
4BG1TAABA-01	A-4BG1T 81.5	109.2@2400	80.6@2400	43.0@2400	281.4@1600	88.9@1600	31.6@1600	EM,TC,DDI
4BG1TAABA-02	A-4BG1T	91.3@1750	85.6@1750	33.4@1750	281.4@1600	88.9@1600	31.6@1600	EM,TC,DDI
4BG1TAABA-03	A-4BG1T	63.2@2400	48.3@2400	25.8@2400	165.1@1600	51.5@1600	18.3@1600	EM,TC,DDI
4BG1TAABA-04	A-4BG1T 39.8	53.4@1750	50.5@1750	19.7@1750	165.1@1600	51.5@1600	18.3@1600	EM,TC,DDI
4BG1TAABA-05	A-4BG1T	92.8@2200	69.0@2200	33.8@2200	237.5@1400	74.3@1400	23.1@1400	EM,TC,DDI
4BG1TAABA-06	A-4BG1T	86.2@1900	76.3@1900	32.2@1900	255.9@1400	79.3@1400	24.7@1400	EM,TC,DDI
4BG1TAABA-07	A-4BG1T	87.0@2100	69.0@2100	32.2@2100	236.0@1400	74.2@1400	23.1@1400	EM,TC,DDI
4BG1TAABA-08	A-4BG1T	107.5@2300	77.8@2300	39.8@2300	272.9@1400	84.3@1400	26.2@1400	EM,TC,DDI
4BG1TAABA-09	A-4BG1T	100.4@2000	81.7@2000	36.3@2000	281.7@1600	77.4@1600	27.5@1600	EM,TC,DDI
4BG1TAABA-10	A-4BG1T	87.8@2050	69.5@2050	31.7@2050	281.7@1600	77.4@1600	27.5@1600	EM,TC,DDI
4BG1TAABA-11	A-4BG1T	84.2@2000	70.4@2000	31.3@2000	246.9@1500	76.0@1500	25.3@1500	EM,TC,DDI
4BG1TAABA-12	A-4BG1T	97.6@2200	76.0@2200	37.2@2200	266.3@1600	81.1@1600	28.9@1600	EM,TC,DDI
4BG1TAABA-13	A-4BG1T	99.2@2200	77.2@2200	37.8@2200	266.3@1600	81.1@1600	28.9@1600	EM,TC,DDI