California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0086 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	2SZXL06.5BNA	6.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection	Pump, Generator, Lift, 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	--	8.4	--	--	--	11	7	22

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: **2SZXL06.5BNA**

Mfr Family Name: **NA**

Process Code: **Running Change**, Mar. 27, 2002

ATTACHMENT

EO U-R-006-0086

Page 2

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
6BG1NAABA-01	A-6BG1	123.2@2500	60.1@2500	50.1@2500	305.1@1500	65.1@1500	32.6@1500	EM,DFI DDI
6BG1NAABA-02	A-6BG1	103.0@1800	64.8@1800	38.9@1800	305.1@1500	65.1@1500	32.6@1500	EM,DFI
6BG1NAABA-03	A-6BG1	88.4@2500	44.5@2500	37.1@2500	204.8@1500	43.0@1500	21.5@1500	EM,DFI
6BG1NAABA-04	A-6BG1	71.5@1800	44.3@1800	26.6@1800	204.8@1500	43.0@1500	21.5@1500	EM,DFI
6BG1NAABA-05	A-6BG1	98.6@1800	61.7@1800	37.1@1800	297.5@1600	60.9@1600	32.5@1600	EM,DFI
6BG1NAABA-06	A-6BG1	114.8@2000	64.2@2000	43.2@2000	305.1@1600	65.1@1600	34.7@1600	EM,DFI
6BG1NAABA-07	A-6BG1	114.0@2300	56.1@2300	43.0@2300	305.9@1600	63.0@1600	33.6@1600	EM,DFI
6BG1NAABA-08	A-6BG1	125.0@2300	60.0@2300	46.0@2300	305.1@1600	65.1@1600	34.7@1600	EM,DFI
6BG1NAABA-09	A-6BG1	123.2@2500	60.1@2500	50.1@2500	305.1@1600	65.1@1600	34.7@1600	EM,DFI
6BG1NAABA-10	A-6BG1	115.3@2350	60.9@2350	47.7@2350	305.1@1600	65.1@1600	34.7@1600	EM,DFI
6BG1NAABB-01	A-6BG1	94.9@2000	49.6@2000	33.1@2000	260.8@1600	52.2@1600	27.9@1600	EM,DFI
6BG1NAABC-01	A-6BG1	102.7@1800	64.5@1800	38.7@1800	305.1@1500	65.1@1500	32.6@1500	EM,DFI
6BG1NAABD-01	A-6BG1	117.6@2100	62.2@2100	43.6@2100	305.1@1500	65.1@1500	32.6@1500	EM,DFI
6BG1NAABE-01	A-6BG1	96.8@1800	64.2@1800	38.5@1800	305.1@1500	65.1@1500	32.6@1500	EM,DFI
6BG1NAABF-01	A-6BG1	115.3@2350	60.9@2350	47.7@2350	305.1@1600	65.1@1600	34.7@1600	EM,DFI
6BG1NAABD-02	A-6BG1	115.6@2200	61.0@2200	44.8@2200	305.1@1500	65.1@1500	32.6@1500	EM,DFI