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 California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0102 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	2SZXL04.3GXA	4.3	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler			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	--	6.8	--	--	--	4	2	7

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

EO U-R-006-0102

ATTACHMENT

Manufacturer: **Isuzu Motors Limited**
 Engine category: **Nonroad CI**
 EPA Engine Family: **2SZXL04.3GXA**
 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
4BG1XABGA-01	CC-4BG1T 74.0	99.2@2200	75.3@2200	36.8@2200	262.1@1400	79.4@1400	24.7@1400	EM,TC,CAC,DI
4BG1XABGA-02	CC-4BG1T	63.1@2200	50.4@2200	24.7@2200	157.3@1400	48.8@1400	15.2@1400	EM,TC,CAC,DI
4BG1XABGA-03	CC-4BG1T	85.6@1800	76.1@1800	30.5@1800	262.1@1400	79.4@1400	24.7@1400	EM,TC,CAC,DI
4BG1XABGA-04	CC-4BG1T 38.8	52.0@1750	49.0@1750	19.1@1750	157.3@1400	48.8@1400	15.2@1400	EM,TC,CAC,DI
4BG1XABGA-05	CC-4BG1T	90.8@2150	70.0@2150	33.4@2150	236.0@1600	75.1@1600	26.7@1600	EM,TC,CAC,DI

kw