## ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0117 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-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems 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)	
2003	3SZXL02.4CNA	2.4	Diesel	8000	
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Indirect Diesel Injection			Compressor, Generator Set		

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	EMISSION STANDARD				EXHAUST (g/kw-hr)			OPACITY (%)		
CLASS	CATEGORY		HC	NOx	NMHC+NOx	СО	РМ	ACCEL	LUG	PEAK
37 ≤ KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		5.6				14	4	39

**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.

day of September 2002.

Allen Jons, Chief

Mobile Source Operations Division

ATACHMENT

## **Engine Model Summary Form**

Manufacturer: Isuzu Motors Limited
Engine category: Nonroad CI

EPA Engine Family: 3SZXL02.4CNA

Mfr Family Name: NA
Process Code: New

ode: New Submission

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	C240NAACA-01 C240NAACA-02	1.Engine Code
	C240 C240	1.Engine Code 2.Engine Model
40.6 km	7 54.4@3000 52.0@3000	3.BHP@RPM (SAE Gross)
	37.3@3000 36.2@3000	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)
	26.0@3000 23.8@3000	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)
	104.7@2200 101.8@2200	6.Torque @ RPM (SEA Gross)
	38.9 @ 2200 37.1 @ 2200	7.Fuel Rate: mm/stroke@peak torque
	19.0@2200 17.9@2200	8.Fuel Rate: (lbs/hr) @peak torque
	EM,IDI	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930

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