

ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0122 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	3SZXL03.1GNA	3.1	Diesel	8000
SPECIAL I	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Indirect Diesel Injection		Excavator, Lift		

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		EXHAUST (g/kw-hr)				OPACITY (%)				
CLASS	STANDARD CATEGORY		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	<u> </u>	6.5				3	3	4

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 ______ day of September 2002.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form

Engine category: Nonroad CI

Manufacturer: Isuzu Motors Limited

Process Code:

Mfr Family Name: NA EPA Engine Family: 3SZXL03.1GNA

New Submission

Peg	B
6	3
_	,
7	1-16
_	2-0
	90
	0

	4JG2NBBGA-02 4JG2NBBGA-05 4JG2NBBGA-06	1.Engine Code
h)	4JG2 4JG2 4JG2	1.Engine Code 2.Engine Model
(46.0 km)	56.2@2000 →61.6@2450 57.2@2100	3.BHP@RPM (SAE Gross)
	50.9@2000 49.7@2450 49.4@2100	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)
	22.7@2000 27.1@2450 23.1@2100	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)
	150.8@1600 145.4@1600 145.4@1600	6.Torque @ RPM (SEA Gross)
	53.0@1600 51.9@1600 51.9@1600	7.Fuel Rate: mm/stroke@peak torque
	18.8@1600 19.6@1600 19.6@1600	8.Fuel Rate: (fbs/hr) @peak torque
	EM,IDI EM,IDI EM,IDI	8.Fuel Rate: 9.Emission Control (tbs/hr)@peak torque Device Per SAE J1930

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