

## **ISUZU MOTORS LIMITED**

EXECUTIVE ORDER U-R-006-0238 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	THE PROPERTY I		FUEL TYPE	USEFUL LIFE (hours)			
2006	6SZXL04.3FXA	4.3	Diesel	8000			
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SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Die	sel Injection, Turbocharg	er, Charge Air Cooler	Compressor, Other Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon 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	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS			нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT			5.8	1.3	0.26	12	7	34

**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 22 day of December 2005.

Raphael Sussourts In Allen Lyons, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

ATTACHMENT

Isuzu Motors Limited Manufacturer:

Engine category: Nonroad CI
EPA Engine Family: 6SZXL04.3FXA

Mfr Family Name: NA

New Submission Process Code:

8.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torque Device Per SAE J1930	EM,TC,CAC,DFI	EM,TC,CAC,DFI	EM,TC,CAC,DFI	EM,TC,CAC,DFI	EM, TC, CAC, DFI	EM,TC,CAC,DFI	EM,TC,CAC,DFI
8.Fuel Rate: (lbs/hr)@peak torque	43.1@1800	35.7@1800	40.9@1800	36.9@1800	40.9@1800	46.8@1800	44.6@1800
7.Fuel Rate: mm/stroke@peak torque	107.7@1800	89.3@1800	102.1@1800	92.3@1800	102.1@1800	117.0@1800	111.3@1800
6.Torque @ RPM (SEA Gross)	347.8@1800	305.9@1800	347.9@1800	320.6@1800	347.9@1800	372.0@1800	354.0@1800
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	47.0@2200	41.0@2150	47.2@2300	41.4@2150	46.3@2200	58.2@2500	52.6@2300
4.Fuel Rate: mru⁄stroke @ peak HP (for diesel only)	96.1@2200	85.8@2150	92.3@2300	86.7@2150	94.7@2200	104,6@2500	102.9@2300
3.BHP@RPM (SAE Gross)	126.7@2200	111.7@2150	127.4@2300	117.0@2150	125.1@2200	140.0@2500	137.1@2300
1.Engine Code 2.Engine Model	AA-4BG1T	AA-4BG1T	AA-4BG1T	AA-4BG1T	AA-4BG1T	AA-4BG1T	AA-4BG1T
1.Engine Code	4BG1XABFA-05	4BG1XABFA-06	4BG1XABFA-07	4BG1XABFA-08	4BG1XABFA-09	4BG1XABFB-01	4BG1XABFB-02