



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	2SZXL04.3FXA	4.3	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Compressor, 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	--	5.8	--	--	--	12	5	32

**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: **2SZXL04.3FXA**  
 Mfr Family Name: **NA**  
 Process Code: **Running Change, Mar. 27, 2002**

ATTACHMENT

EO V-R-006-0085  
Pg 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
4BG1XABFA-01	AA-4BG1T	138.9@2500	98.5@2500	54.8@2500	358.1@1800	107.9@1800	43.2@1800	EM,TC,CAC,DFI <i>DFI</i>
4BG1XABFA-02	AA-4BG1T	134.0@2100	104.1@2100	48.6@2100	358.1@1800	107.9@1800	43.2@1800	EM,TC,CAC,DFI
4BG1XABFA-03	AA-4BG1T	101.0@2500	71.0@2500	39.5@2500	223.4@2200	68.8@2200	33.7@2200	EM,TC,CAC,DFI
4BG1XABFA-04	AA-4BG1T	86.2@2100	67.0@2100	31.3@2100	216.1@2100	67.0@2100	31.3@2100	EM,TC,CAC,DFI
4BG1XABFA-05	AA-4BG1T	126.7@2200	96.1@2200	47.0@2200	347.8@1800	107.7@1800	43.1@1800	EM,TC,CAC,DFI
4BG1XABFA-06	AA-4BG1T	111.7@2150	85.8@2150	41.0@2150	305.9@1800	89.3@1800	35.7@1800	EM,TC,CAC,DFI
4BG1XABFA-07	AA-4BG1T	127.4@2300	92.3@2300	47.2@2300	347.9@1800	102.1@1800	40.9@1800	EM,TC,CAC,DFI
4BG1XABFA-08	AA-4BG1T	117.0@2150	86.7@2150	41.4@2150	320.6@1800	92.3@1800	36.9@1800	EM,TC,CAC,DFI
4IRB7IBFA-01	4IRB7I	138.9@2500	98.5@2500	54.8@2500	358.1@1800	107.9@1800	43.2@1800	EM,TC,CAC,DFI
4BG1XABFA-09	AA-4BG1T	125.1@2200	94.7@2200	46.3@2200	347.9@1800	102.1@1800	40.9@1800	EM,TC,CAC,DFI
4BG1XABFA-10	AA-4BG1T	137.1@2300	99.3@2300	50.8@2300	354.0@1800	107.7@1800	43.1@1800	EM,TC,CAC,DFI

