



AIR RESOURCES BOARD

ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0099
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-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	2SZXL03.1GTA	3.1	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger			Loader, Compressor	

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	--	6.4	--	--	--	10	3	18

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

ATTACHMENT

EO U-R-006-0099

Manufacturer: **Isuzu Motors Limited**
 Engine category: **Nonroad CI**
 EPA Engine Family: **2SZXL03.1GTA**
 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
4JG1TABGA-01	AA-4JG1T <i>kw</i>	82.7@2500	60.0@2500	33.4@2500	199.1@1800	62.8@1800	25.1@1800	EM,TC,DP1
4JG1TABGA-02	AA-4JG1T	72.0@2150	59.7@2150	28.7@2150	190.2@1800	59.7@1800	23.9@1800	EM,TC,DP1
4JG1TABGA-03	AA-4JG1T	81.6@2500	59.7@2500	33.2@2500	191.0@1800	60.0@1800	24.0@1800	EM,TC,DP1
4JG1TABGA-04	AA-4JG1T	61.8@1800	59.1@1800	23.7@1800	191.0@1600	60.0@1600	21.4@1600	EM,TC,DP1
4JG1TABGA-05	AA-4JG1T	81.8@2500	59.7@2500	33.2@2500	191.0@1600	60.0@1800	24.0@1800	EM,TC,DP1
4IRJ7BGA-01	4IRJ7T	81.6@2500	59.7@2500	33.2@2500	191.0@1800	60.0@1800	24.0@1800	EM,TC,DP1