



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	2SZXL02.8CNB	2.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Loader, Tractor	

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	--	7.5	--	--	--	9	12	12

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-006-0095

Manufacturer: **Isuzu Motors Limited**
 Engine category: **Nonroad CI**
 EPA Engine Family: **2SZXL02.8CNCB**
 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
4JB1NBACA-01	4JB1 50.5	67.7@3000	41.1@3000	27.5@3000	140.5@1800	44.8@1800	18.0@1800	EM,DFI
4JB1NBACA-02	4JB1	64.1@2600	42.5@2600	24.6@2600	140.5@1800	44.8@1800	18.0@1800	EM,DFI
4JB1NBACA-03	4JB1	57.9@3000	33.8@3000	22.6@3000	123.0@1800	37.5@1800	15.0@1800	EM,DFI
4JB1NBACA-04	4JB1 42.1	56.5@2600	34.9@2600	20.1@2600	123.0@1800	37.5@1800	15.0@1800	EM,DFI
4JB1NBACA-05	4JB1	59.0@2600	37.1@2600	24.7@2600	136.0@1600	41.2@1600	16.5@1600	EM,DFI
4JB1NBACA-06	4JB1	66.2@3000	37.4@3000	24.9@3000	127.3@1800	38.5@1800	15.4@1800	EM,DFI

DDI
(5/11)