

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	2SZXL06.5FTA	6.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger			Loader, Compressor, Lift, 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
75 ≤ KW < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	6.3	--	--	--	9	3	15

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: **2SZXL06.5FTA**
 Mfr Family Name: **NA**
 Process Code: **Running Change, Mar. 27, 2002**

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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
6BG1TABFA-01	BB-6BG1T	170.7@2200	90.7@2200	66.6@2200	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFA-02	BB-6BG1T	164.4@1950	94.1@1950	61.2@1950	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFA-03	BB-6BG1T	129.4@2200	68.6@2200	50.3@2200	309.3@2200	68.6@2200	50.3@2200	EM,TC,DFI
6BG1TABFA-04	BB-6BG1T	104.9@1950	60.1@1950	39.1@1950	282.6@1950	60.1@1950	39.1@1950	EM,TC,DFI
6BG1TABFB-01	BB-6BG1T	167.8@2150	92.1@2150	66.1@2150	429.6@1800	88.7@1800	53.3@1800	EM,TC,DFI
6BG1TABFB-02	BB-6BG1T	141.5@1950	82.6@1950	53.7@1950	395.0@1800	86.1@1800	51.7@1800	EM,TC,DFI
6BG1TABFC-01	BB-6BG1T	131.0@2200	70.0@2200	51.3@2200	402.7@1400	81.6@1400	38.1@1400	EM,TC,DFI
6BG1TABFA-05	BB-6BG1T	167.4@2200	85.2@2200	62.5@2200	427.8@1800	89.5@1800	53.7@1800	EM,TC,DFI
6BG1TABFA-06	BB-6BG1T	144.2@2000	84.1@2000	56.1@2000	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFA-07	BB-6BG1T	142.1@1950	84.1@1950	54.7@1950	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFA-08	BB-6BG1T	165.9@2150	88.1@2150	63.2@2150	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6IRB7TBFA-01	6IRB7T	170.7@2200	90.7@2200	66.6@2200	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI

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Engine Model Summary Form

Manufacturer: **Isuzu Motors Limited**
 Engine category: **Nonroad CI**
 EPA Engine Family: **2SZXL06.5FTA**
 Mfr Family Name: **NA**
 Process Code: **Running Change**, *July 3, 2002*

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1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mmi/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mmi/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
6BG1TABFA-01	BB-6BG1T	170.7@2200	90.7@2200	66.6@2200	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFA-02	BB-6BG1T	164.4@1950	94.1@1950	61.2@1950	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFA-03	BB-6BG1T	129.4@2200	68.6@2200	50.3@2200	309.3@2200	68.6@2200	50.3@2200	EM,TC,DFI
6BG1TABFA-04	BB-6BG1T	104.9@1950	60.1@1950	39.1@1950	282.6@1950	60.1@1950	39.1@1950	EM,TC,DFI
6BG1TABFB-01	BB-6BG1T	167.8@2150	92.1@2150	66.1@2150	429.6@1800	88.7@1800	53.3@1800	EM,TC,DFI
6BG1TABFB-02	BB-6BG1T	141.5@1950	82.6@1950	53.7@1950	395.0@1800	86.1@1800	51.7@1800	EM,TC,DFI
6BG1TABFC-01	BB-6BG1T	131.0@2200	70.0@2200	51.3@2200	402.7@1400	81.6@1400	38.1@1400	EM,TC,DFI
6BG1TABFA-05	BB-6BG1T	167.4@2200	85.2@2200	62.5@2200	427.8@1800	89.5@1800	53.7@1800	EM,TC,DFI
6BG1TABFA-06	BB-6BG1T	144.2@2000	84.1@2000	56.1@2000	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFA-07	BB-6BG1T	142.1@1950	84.1@1950	54.7@1950	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFA-08	BB-6BG1T	165.9@2150	88.1@2150	63.2@2150	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6IRB7T	6IRB7T	170.7@2200	90.7@2200	66.6@2200	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFD-01	BB-6BG1T	170.7@2200	89.8@2200	65.9@2200	454.3@1800	96.1@1800	57.7@1800	EM,TC,DFI
6BG1TABFD-02	BB-6BG1T	164.4@1950	94.1@1950	61.2@1950	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFD-03	BB-6BG1T	129.4@2200	68.6@2200	50.3@2200	309.3@2200	68.6@2200	50.3@2200	EM,TC,DFI
6BG1TABFD-04	BB-6BG1T	104.9@1950	60.1@1950	39.1@1950	282.6@1950	60.1@1950	39.1@1950	EM,TC,DFI
6BG1TABFD-05	BB-6BG1T	167.4@2200	84.3@2200	61.9@2200	427.8@1800	88.6@1800	53.2@1800	EM,TC,DFI
6BG1TABFD-06	BB-6BG1T	144.2@2000	84.1@2000	56.1@2000	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFD-07	BB-6BG1T	142.1@1950	84.1@1950	54.7@1950	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFD-08	BB-6BG1T	165.9@2150	88.1@2150	63.2@2150	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFE-01	BB-6BG1T	167.8@2150	92.1@2150	66.1@2150	429.6@1800	88.7@1800	53.3@1800	EM,TC,DFI
6BG1TABFE-02	BB-6BG1T	141.5@1950	82.6@1950	53.7@1950	395.0@1800	86.1@1800	51.7@1800	EM,TC,DFI
6BG1TABFF-01	BB-6BG1T	131.0@2200	70.0@2200	51.3@2200	402.7@1400	81.6@1400	38.1@1400	EM,TC,DFI
6BG1TABFG-01	BB-6BG1T	170.7@2200	89.8@2200	65.9@2200	454.3@1800	96.1@1800	57.7@1800	EM,TC,DFI
6BG1TABFG-02	BB-6BG1T	164.4@1950	94.1@1950	61.2@1950	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI
6BG1TABFG-03	BB-6BG1T	129.4@2200	68.6@2200	50.3@2200	309.3@2200	68.6@2200	50.3@2200	EM,TC,DFI
6BG1TABFG-04	BB-6BG1T	104.9@1950	60.1@1950	39.1@1950	282.6@1950	60.1@1950	39.1@1950	EM,TC,DFI
6BG1TABFG-05	BB-6BG1T	167.4@2200	84.3@2200	61.9@2200	427.8@1800	88.6@1800	53.2@1800	EM,TC,DFI
6BG1TABFG-06	BB-6BG1T	144.2@2000	84.1@2000	56.1@2000	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFG-07	BB-6BG1T	142.1@1950	84.1@1950	54.7@1950	405.7@1600	88.4@1600	47.2@1600	EM,TC,DFI
6BG1TABFG-08	BB-6BG1T	165.9@2150	88.1@2150	63.2@2150	454.3@1800	97.1@1800	58.3@1800	EM,TC,DFI