

ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0158 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	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)					
2003	3SZXL06.5FTA	4.3	Diesel	8000					
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
C	Pirect Diesel Injection, To	urbocharger	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	EMISSION STANDARD			i	EXHAUST (g/kw-l	• •	OPACITY (%)				
CLASS	CATEGORY		HC	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			6.4	1.3	0.26	6	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 _____ day of January 2003.

Allen yons, Chief

Mobile Source Operations Division

Engine Model Summary Form

Engine category: Manufacturer: Nonroad Cl Isuzu Motors Limited

EPA Engine Family: 3SZXL06.5FTA

Process Code: Mfr Family Name: K

New Submission

ATTACHMENT

EO U-R-006.0158

6BG1TABFH-11	6BG1TABFH-10	6BG1TABFH-01	6BG1TABFG-11	6BG1TABFG-10	6BG1TABFG-09	6BG1TABFG-08	6BG1TABFG-07	6BG1TABFG-06	6BG1TABFG-01	6BG1TABFF-01	6BG1TABFE-02	6BG1TABFE-01	6BG1TABFD-12	6BG1TABFD-11	6BG1TABFD-10	6BG1TABFD-08	6BG1TABFD-07	6BG1TABFD-06	6BG1TABFD-02	6BG1TABFD-01	6BG1TABFC-01	1.Engine Code
BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	BB-6BG1T	2.Èngine Model									
163.7@2000	149.8@2200	170.7@2200	163.7@2000	149.8@2200	144.8@2150	165.9@2150	142.1@1950	144.2@2000	tz7 170.7@2200	131.0@2200	141.5@1950	167.8@2150	131.0@2200	163.7@2000	149.8@2200	165.9@2150	142.1@1950	144.2@2000	164.4@1950	170.7@2200	9 € 131.0@2200	3.BHP@RPM (SAE Gross)
93.0@2000	78.1@2200	89.8@2200	93.0@2000	78.1@2200	78.1@2150	88.1@2150	84.1@1950	84.1@2000	89.8@2200	70.0@2200	82.6@1950	92.1@2150	70.0@2000	93.0@2000	78.1@2200	88.1@2150	84.1@1950	84.1@2000	94.1@1950	89.8@2200	70.0@2200	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)
62.0@2000	54.7@2200	65.9@2200	62.0@2000	54.7@2200	56.0@2150	63.2@2150	54.7@1950	56.1@2000	65.9@2200	51.3@2200	53.7@1950	66.1@2150	51.3@2000	62.0@2000	54.7@2200	63.2@2150	54.7@1950	56.1@2000	61.2@1950	65.9@2200	51.3@2200	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)
454.3@1800	405.7@1600	454.3@1800	454.3@1800	405.7@1600	396.4@1600	454.3@1800	405.7@1600	405.7@1600	454.3@1800	402.7@1400	395.0@1800	429.6@1800	402.7@1400	454.3@1800	405.7@1600	454.3@1800	405.7@1600	405.7@1600	454.3@1800	454.3@1800	402.7@1400	6.Torque @ RPM (SEA Gross)
97.1@1800	88.4@1600	96.1@1800	97.1@1800	88.4@1600	82.4@1600	97.1@1800	88.4@1600	88.4@1600	96.1@1800	81.6@1400	86.1@1800	88.7@1800	81.6@1400	97.1@1800	88.4@1600	97.1@1800	88.4@1600	88.4@1600	97.1@1800	96.1@1800	81.6@1400	7.Fuel Rate: mm/stroke@peak torque
58.3@1800	47.2@1600	57.7@1800	58.3@1800	47.2@1600	44.0@1600	58.3@1800	47.2@1600	47.2@1600	57.7@1800	38.1@1400	51.7@1800	53.3@1800	38.1@1400	58.3@1800	47.2@1600	58.3@1800	47.2@1600	47.2@1600	58.3@1800	57.7@1800	38.1@1400	8.Fuel Rate: (lbs/hr)@peak torque
EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI	EM,TC,DFI ⊅ઐ i	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930									

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