California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0158-1 New Off-Road
		Compression-Ignition Enginee

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 6.5		Diesel	8000		
SPECIAL	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger		Loader, Compressor, Lift, Excavator				

The engine models and codes are attached.

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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	RATED EMISSION POWER STANDARD			EXHAUST (g/kw-hr)				OPACITY (%)		
CLASS	CATEGORY		нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
75≤kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
L <u> </u>		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.

This Executive Order hereby cancels and replaces Executive Order U-R-006-0158 dated January 10, 2003.

Executed at El Monte, California on this ______ day of January 2003.

Allen Lyons, Chief Mobile Source Operations Division

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EPA Engine Family: Engine category: Mfr Family Name: Manufacturer: NA 3SZXL06.5FTA Nonroad CI Isuzu Motors Limited

New Submission

Process Code:

6BG1TABFD-01 E 6BG1TABFD-02 E 6BG1TABFD-02 E 6BG1TABFD-06 E 6BG1TABFD-07 E 6BG1TABFD-08 E 6BG1TABFD-07 E 6BG1TABFD-08 E 6BG1TABFD-10 E 6BG1TABFD-11 E 6BG1TABFD-12 E 6BG1TABFE-01 E	1.Engine Code 2.E
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ngine Model
131.0@2200 70.7@2200 64.4@1950 44.2@2000 42.1@1950 65.9@2150 65.9@2200 63.7@2200 67.8@2150 31.0@2200 31.0@2200 31.0@2200 31.0@2200	3.BHP@RPM (SAE Gross)
70.0@2200 89.8@2200 94.1@1950 84.1@2000 84.1@1950 88.1@2150 78.1@2200 93.0@2000 92.1@2150 82.6@1950 70.0@2200 89.8@2200	4.Fuel Rate: nm/stroke @ peak HP (for diesel only)
51.3@2200 65.9@2200 61.2@1950 56.1@2000 54.7@1950 63.2@2150 62.0@2000 62.0@2000 65.1@2150 53.7@1950 51.3@2200 65.9@2200	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)
402.7@1400 454.3@1800 405.7@1600 405.7@1600 454.3@1800 405.7@1600 454.3@1800 402.7@1400 429.6@1800 395.0@1800 402.7@1400 4402.7@1400	6.Torque @ RPM (SEA Gross)
81.6@1400 96.1@1800 97.1@1800 88.4@1600 97.1@1800 88.4@1600 97.1@1800 81.6@1400 88.7@1800 81.6@1400 81.6@1400 81.6@1400	7.Fuel Rate: mm/stroke@peak lorque
38.1@1400 57.7@1800 57.2@1600 47.2@1600 47.2@1600 58.3@1800 47.2@1600 58.3@1800 58.3@1800 53.3@1800 53.3@1800 53.3@1800	8.Fuel Rale: (lbs/hr)@peak lorgue_r
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	9.Emission Control

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EM, TC, DFI

EM,TC,DF EM,TC,DFI EM, TC, DFI EM,TC,DFI

EM,TC,DF

EM,TC,DFI

EM, TC, DFI

EM,TC,DFI EM, TC, DF

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6BG1TABFH-11 6BG1TABFH-10

BB-6BG11 BB-6BG17

> 149.8@2200 170.7@2200 163.7@2000 149.8@2200

163.7@2000

93.0@2000

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

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

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

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

89.8@2200 93.0@2000 78.1@2200 78.1@2150 88.1@2150

78.1@2200

6BG1TABFG-10 6BG1TABFG-09 6BG1TABFG-08

6BG1TABFG-07 6BG1TABFG-06 6BG1TABFG-01 6BG1TABFF-01 6BG1TABFE-02 6BG1TABFE-01 6BG1TABFD-12 6BG1TABFD-11 6BG1TABFD-10

BB-6BG1T BB-6BG1T

144.8@2150 165.9@2150 142.1@1950 144.2@2000

BB-6BG17 BB-6BG1T

84.1@2000 84.1@1950

6BG1TABFH-01 6BG1TABFG-11

BB-6BG1T BB-6BG11 BB-6BG1T

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