EXECUTIVE ORDER U-R-006-0087 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	2SZXL06.5BTA	6.5	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
C	Direct Diesel Injection, T	urbocharger	Loader, Compressor, Ger	erator, 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	EMISSION				EXHAUST (g/kw-l	ır)		0	PACITY (	%)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
37 ≤ KW < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
37 <u>21(47 + 100</u>	710.1	CERT		7.6				11	3	20

**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 November 200

R. B. Summerfield, Chief Mobile Source Operations Division

## Engine Model Summary Form

Manufacturer:	Isuzu Motors Limited	ited				Eo U	1 x 64 - 98 4 - 4-1) 0=	NO K1
Engine category: EPA Engine Family. Mfr Family Name:	Nonroad Cl 2SZXL06.5BTA NA		ATTA	TACHENEN	5		7	
Process Code:	New Submission							
		lew 3.8HP@RPM	4.Fuel Rate: mm/stroke @ peak HP	5.Fuel Rate: (lbs/hr) @ peak HP	6.Torque @ RPM	7.Fuel Rate: mm/stroke@peak	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
1.Engine Code	Z.Engine Model ↓	(SAE Gross)	(ioi diesei Oiliy)	(in descip io)	(2000 0-10)		•	
6BG1TAABA-01	A-6BG1T 126.	169.2@2500	82.3@2500	68.6@2500	447.4@1800	91.5@1800	54.9@1800	EM,TC,Db!
GRG1TAABA-02		153.4@1800	91,5@1800	54.9@1800	447.4@1800	91.5@1800	54.9@1800	EM,TC,DDI
6BG1TAABA-03	A-6BG1T	120.3@2500	60.2@2500	50.2@2500	299.4@2000	63.2@2000	42.2@2000	EM,TC,D91
6BG1TAABA-04		Ed / 77.9@1800	48.6@1800	29.2@1800	227.2@1800	48.6@1800	29.2@1800	EM,TC,Db!
6BG1TAABA-05		144.4@2000	78.2@2000	52.2@2000	405.4@1600	82.6@1600	44.1@1600	EM,TC,Db1
6BG1TAABA-06	A-6BG1T	165.2@2150	86.1@2150	61.7@2150	439.3@1600	90.4@1600	48.3@1600	EM,TC,D01
6BG1TAABA-07	A-6BG1T	162.7@2500	80.4@2500	67.1@2500	442.2@1800	84.8@1800	50.9@1800	EM,TC,DDI
6BG1TAABA-08	A-6BG1T	172.1@2500	78.2@2500	65.2@2500	451.0@1600	92.2@1600	49.2@1600	EM,TC,DPI
6BG1TAABA-09	A-6BG1T	152.7@2200	73.0@2200	53.6@2200	416.9@1600	81.7@1600	43.6@1600	EM,TC,DD
6BG1TAABA-10	A-6BG1T	159.2@2300	82.0@2300	62.9@2300	426.1@1600	87.6@1600	46.8@1600	EM,TC,DDI
6BG1TAABB-01	A-6BG1T	155,4@2200	83.9@2200	61.6@2200	408.8@1600	86.7@1600	46.3@1600	EM,TC,DDI
6BG1TAABB-02	A-6BG1T	134.4@1750	84.2@1750	49.2@1750	408.8@1600	86.7@1600	46.3@1600	EM,TC,DŊI
6BG1TAABB-03	A-6BG1T	108.8@2200	59.0@2200	43.3@2200	277.1@1600	57.6@1600	30.7@1600	EM,TC,DDI
6BG1TAABB-04	A-6BG1T	88.2@1750	55.9@1750	32.6@1750	277.1@1600	57.6@1600	30.7@1600	EM,TC,DDI
6BG1TAABB-05	A-6BG1T	136.6@1750	83.9@1750	49.0@1750	432.1@1600	86.9@1600	46.4@1600	EM,TC,Dp1
6BG1TAABB-06	A-6BG1T	145.8@1750	90.0@1750	52.5@1750	452.4@1600	90.8@1600	48.5@1600	EM,TC,Dbl
6BG1TAABB-07	A-6BG1T	137.7@1900	77.4@1950	49.1@1900	388.0@1600	76.9@1600	40.0@1600	EM,TC,DPI
6BG1TAABB-08	A-6BG1T	139.1@1950	77.4@1900	50,4@1950	430.6@1600	78.7@1600	42.0@1600	EM,TC,DPI
6BG1TAABB-09	A-6BG1T	143.7@2000	79.5@2000	53.0@2000	414.8@1600	82.6@1600	44.1@1600	EM,TC,DDI
6BG1TAABB-10	A-6BG1T	152.4@2150	77.8@2150	55.8@2150	405.4@1600	80.9@1600	43.2@1600	EM,TC,DDI
6BG1TAABB-11	A-6BG1T	128.0@2200	66.1@2200	48.5@2200	367.5@1600	73.0@1600	39.0@1600	EM,TC,DVI
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