

KOMATSU LIMITED

EXECUTIVE ORDER U-R-005-0282 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 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)		
2007	7KLXL0505AAE	8.3	Diesel	8000		
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Direct Dies	sel Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, dules	Loader, Tractor, Dozer			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon 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-hr)				OPACITY (%)			
POWER	STANDARD CATEGORY		HC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 ≤ kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT			4.0	1.8	0.16	4	1	11

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 December 2006.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form ATTACHEST RE (04)

Manufacturer: Komatsu Ltd.

Engine category: Nonroad CI

EPA Engine Family. 7KLXL0505AAE

Mfr Family Name: L413

Process Code: Running Change

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8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930	DX, ECM, TC, CAC	ECM TC CAC	ECM TC CAC				
8.Fuel Rate: (lbs/hr)@peak torque	105.2	88.2	81.3	82.6	73.8	88.2	82.6 W
7.Fuel Rate: mm/stroke@peak torque	208	180	166	169	151	180	169
6.Torque @ RPM (SEA Gross)	1020@1500	833@1450	746@1450	752@1450	730@1450	833@1450	752@1450
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	118.2	95.5	79.5	95.1	80.1	95.5	95.1
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	159	145	121	134	125	145	134
3.BHP@RPM (SAE Gross)	305@2200	260@1950	207@1950	232@2100	207@1900	260@1950	232@2100
2.Engine Model	SAA6D114E-3	SAA6D114E-3	SAA6D114E-3	SAA6D114E-3	SAA6D114E-3	SAA6D114E-3	SAA6D114E-3
1.Engine Code	8539;FR91358	8537;FR91356	8537;FR91497	8537;FR91711	8537;FR91699	2722;FR91356	2723;FR91711 SAA6D114E-3