

## **KOMATSU LIMITED**

EXECUTIVE ORDER U-R-005-0273 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	7KLXL30.5GD3	30.5	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Direct Dies	sel Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Loader, Dozer and Other Industrial Equipment			

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):

POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
			нс	NOx	NMHC+NOx	co .	PM	ACCEL	LUG	PEAK
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			5.9	0.6	0.15	12	5	19

**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

## LARGE ENGINE MODEL SUMMARY

06/9/18

W-R-005-2273

Manufacturer: Komatsu Ltd.

Process Code: New Submission

EPA Engine Family: 7KLXL30.5GD3

Manufacturer Family Name: SAA12V140E-3

8.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torque \_\_Device Per SAE J1930 EM. ECM,TC,CAC,DFI EM. ECM,TC,CAC,DFI EM. ECM, TC, CAC, DFI EM, ECM, TC, CAC, DFI EM. ECM, TC, CAC, DFI 293 262 254 251 mm/stroke@peak t 7.Fuel Rate: orque 296 366 324 280 269 6. Torque @ RPM (SEA Gross) 3067@1300 3313@1350 2821@1400 2806@1400 3747@1350 (lbs/hr) @ peak HP (for diesels only) 5.Fuel Rate: 319 410 336 321 300 mm/stroke @ peak HP (for diesel only) 4.Fuel Rate: 278 240 236 3.BHP@RPM (SAE Gross) 1200@1900 976@1800 899@2000 900@2050 853@2000 SAA12V140E-3 SAA12V140E-3 SAA12V140E-3 SAA12V140E-3 SAA12V140E-3 2.Engine Model 1.Engine Code 2C02 2C03 2C04 2C05 2C01