

## **KOMATSU LIMITED**

EXECUTIVE ORDER U-R-005-0270 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	7KLXL15.2ED6	15.2	Diesel	8000			
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Engin	ne Control Module, Direct Turbocharger, Charge A Exhaust Gas Recirc	Air Cooler,	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):

RATED	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS			нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
225 ≤ kW < 450	Tier 3	QTS	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT			3.6	0.4	0.15	11	4	16

**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.

Annette Hebert, Chief

Mobile Source Operations Division

## LARGE ENGINE MODEL SUMMARY

06/9/18

U-R-005-027

Manufacturer: KOMATSULTD.

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque · Device Per SAE J1930 EM,TC,CAC,EGR,DFI,ECM EM.TC,CAC,EGR,DFI,ECM EM.TC,CAC,EGR.DFI.ECM EM.TC,CAC,EGR,DFI,ECM EM,TC,CAC,EGR,DFI,ECM EM.TC,CAC,EGR,DFI,ECM EM,TC,CAC,EGR,DFI,ECM EM.TC,CAC,EGR.DFI,ECM EM.TC,CAC,EGR.DFI.ECM EM.TC.CAC,EGR.DFI.ECM 146 130 123 143 149 144 146 -mm/stroke@peak t SAA6D140E-5 7.Fuel Rate: orque 322 290 285 303 316 305 322 6. Torque @ RPM 1468@1400 1619@1350 (SEA Gross) 619@1350 497@1400 541@1400 435@1400 353@1300 601@1400 1331@1250 Manufacturer Family Name: (lbs/hr) @ peak HP (for diesels only) 5.Fuel Rate: 150 130 160 163 151 170 201 170 mm/stroke @ peak HP (for diesel only) 4.Fuel Rate: 205 238 243 281 251 3.BHP@RPM (SAE Gross) 496@1800 578@1800 357@1900 496@1800 433@1800 360@1900 452@2000 453@2000 407@2000 518@2000 7KLXL15.2ED6 SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 2.Engine Model SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 SAA6D140E-5 EPA Engine Family: 1.Engine Code 3C08 6DTA15KCM-3 3C033C04 3C05 3C06 3C07 3C02 3C01

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