

## KOMATSU LTD.

## **EXECUTIVE ORDER U-R-005-0514**

New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in California 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-19-095;

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)				
2022	NKLXL06.7AAP	6.7	Diesel	8000				
SPECIAL	FEATURES & EMISSION (	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Recircula Control M	harger, Charge Air Coc ation, Electronic Direct I lodule, Selective Cataly onia Oxidation, Periodic Oxidation Catal	njection, Electronic vst Reduction-Urea, c Trap Oxidizer,	Loader, Dozer					

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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 POWER CLASS	EMISSION			ı	EXHAUST (g/kw-l		OPACITY (%)			
	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	0.19		0.2	0.001			

**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 on this <u>22nd</u> day of December 2021.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Attachment: Engine Models EO #: U-R-005-0514 Family: NKLXL06.7AAP Attachment Last Revised: 8/16/2021

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel		Peak Torque -	Peak Torque -	Peak Torque - Fuel					
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel Units	ОВ	) GH	G Sp	ecial Notes	
SAA6D107 E-3-A	CPL4458 :FR9458 7		16	6.7	Liters	170	horsepower	2200	84	mm3/stroke	566	lb-ft	1400	118 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL4458 :FR9458 8		16	6.7	Liters	165	horsepower	2000	88	mm3/stroke	539	lb-ft	1500	107 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL4458 :FR9458 6		16	6.7	Liters	154	horsepower	2000	82	mm3/stroke	509	lb-ft	1300	102 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL4458 :FR9458 5		16	6.7	Liters	170	horsepower	2100	85	mm3/stroke	566	lb-ft	1400	113 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL5454 :FR9692 9		16	6.7	Liters	170	horsepower	2200	84	mm3/stroke	566	lb-ft	1400	118 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL5454 :FR9693	N/A	16	6.7	Liters	165	horsepower	2000	88	mm3/stroke	539	lb-ft	1500	107 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL5454 :FR9692 8	N/A	16	6.7	Liters	154	horsepower	2000	82	mm3/stroke	509	lb-ft	1300	102 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	
SAA6D107 E-3-A	CPL5454 :FR9692 7	N/A	16	6.7	Liters	170	horsepower	2100	85	mm3/stroke	566	lb-ft	1400	113 mm3/str	ke N/	. N/	A N/	EM, TC, CAC, EGR DFI, ECM SCR-U, AMOX, PTOX, OC	

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					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel Peak Torqu			Peak Torque - Peak Torque - Peak Torque - Fuel						
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units Peak Torque Units S		Speed (rpm)	Peak Torque - Fuel	l Units	OBD	GHG	Special	Notes	
SAA6D107 E-3-A	CPL5454 :FR9763 6		16	6.7	Liters	170	horsepower	2200	84	mm3/stroke	566	lb-ft	1400	118	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D107 E-3-A	CPL5454 :FR9763 3		16	6.7	Liters	165	horsepower	2100	88	mm3/stroke	539	lb-ft	1500	107	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC