

KOMATSU LIMITED

EXECUTIVE ORDER U-R-005-0262-1 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	7KLXL045.AAA	45.0, 60.0	Diesel	8000				
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION					
Direct Dies	sel Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Mine Truc	k				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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				XHAUST (g/kw-l	OPACITY (%)				
POWER			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
		FEL	N/A	N/A	9.3	N/A	N/A	N/A	N/A	N/A
		CERT			8.5	1.8	0.15	16	5	29

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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.

This Executive Order hereby cancels and replaces Executive Order U-R-005-0262 dated November 6, 2006.

Executed at El Monte, California on this day of March 2007.

__ day of March 2007

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

W-R-005-0262-1

ATTACHHENT PG (041

Komatsu Limited Manufacturer:

Nonroad CI 7KLXL045.AAA Engine category:

EPA Engine Family.

A593 Mfr Family Name: **New Submission** Process Code:

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9.Emisslon Control Device Per SAE J1930	DDI,ECM,TC,CA	DDI,ECM,TC,C	DDIECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C	DDI,ECM,TC,C\		
8.Fuel Rate: (lbs/hr)@peak torque	407	407	577	222	682	682	682	737	588	288		
7.Fuel Rate: mm/stroke@peak torque	464	464	428	428	. 506	206	909	546	436	.436	100	×
6.Torque @ RPM (SEA Gross)	5042@1300	5042@1300	6274@1500	6274@1500	7257@1500	7257@1500	7257@1500	7840@1500	6169@1500	6169@1500		
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	.510 Jak	510	609	609 ∄	850	850	. 098	919	1.884	645		
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	398	860	356	356	497	497	497	535	423	398	E.K.	
3.BHP@RPM (SAE Gross)	1487@1900	1487@1900	1782@1900	1782@1900	2500@1900	2500@1900	2500@1900	2700@1900	2000@1800	1875@1800		
2. Engine Model	SDA12V160	SDA12V160	SSDA16V160	SSDA16V160	SSDA16V160	SSDA16V160	SSDA16V160	SSDA16V160	SSDA16V160	SSDA16V160		
1.Engine Code	2853:FR6268	2469.FR6268	2855:FR6284	2948:FR6284	2848:FR6329	2849:FR6329	2849:FR6554	2851:FR6339	2849:FR6378	2849:FR6379		And the contraction of the contr