EXECUTIVE ORDER U-R-005-0116 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-45-9;

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)		
2002	2KLXL0239ABA	3.9	Diesel	8000		
SPECIAL I	FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT A	APPLICATION		
D	Pirect Diesel Injection, Tu	ırbocharger	Crane, Loader, Tractor, Dozer	Pump, Compressor		

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 POWER	EMISSION STANDARD				XHAUST (g/kw-l	nr)		I OI	PACITY (%	
CLASS	CATEGORY		HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ KW < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		8.2				13	2	34

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 2001.

R. B. Summerfield, Chie

Mobile Source Operations Division

Engine Model Timmary Form ATTACHEROT

Manufacturer: Komatsu

Engine category: Nonroad Over 50 Hp

EPA Engine Family: 2KLXL0239ABA

Mfr Family Name: A382

Process Code: New Submission

110@2500 81 45.3 278@1500 84 28.3 105@2400 77 41.7 280@1500 85 28.7 95@2200 73 35.2 246@1300 75 22.0 90@2200 70 34.8 246@1300 77 22.6 86@2200 65 32.2 246@1300 77 22.6 86@2200 74 31.5 246@1300 78 22.6 75@2350 56 29.7 218@1400 66 20.7 79@2500 57 32.1 218@1400 66 20.7 85@2550 60 33.9 239@1500 77 23.9 91.@2400 68 36.8 253@1600 77 27.8 110@2500 81 45.4 278@1500 89 32.0 105@2300 77 27.8 27.8 27.8 27.8	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuef Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE 11930
8 SAD102E-1 105@2400 77 41.7 280@1500 85 28.7 48.7 1 SAD102E-1 95@2200 73 35.9 28.6@1500 83 28.1 2 SAD102E-1 96@2200 70 34.8 246@1300 77 22.6 3 SAD102E-1 86@2200 65 32.2 246@1300 74 21.6 5 SAD102E-1 86@2200 65 32.2 246@1300 74 21.6 5 SAD102E-1 86@2200 65 29.7 246@1300 74 21.6 5 SAD102E-1 75@2500 66 29.7 246@1300 77 22.9 5 SAD102E-1 76@2500 60 33.9 239@1500 77 27.8 5 SAD102E-1 91@2400 68 36.5 256.0 @160 77 27.8 5 1100@2500 80 43.4 27.8@1500 89 32.0 5 10	χ,	S4D102E-1		81	45.3	278@1500	PH	0.00	
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