DEUTZ AG

EXECUTIVE ORDER U-R-013-0206 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 engines 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	7DZXL02.3048	2.29	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
ı	Direct Diesel Injection, Tu	urbocharger	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	EMISSION	EXHAUST (g/kW-hr)				OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT		-	6.1	1.3	0.30	4	5	6

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

Rophael Susnovit

Mobile Source Operations Division

Attachment Estu-R-013-0206

Engine Model Summary Form

Deutz AG Manufacturer:

Engine category: Nonroad CI EPA Engine Family: 7DZXL02,3048

Mfr Family Name: TD2009L04 CODE CE 50 FAM. Process Code: New Submission

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8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930	DDI, TC, EM	DDI, TC, EM	DDI, TC, EM	DDI, TC, EM	
8.Fuel Rate: (lbs/hr)@peak torque	20,3	20,3	20,3	20,3	
7.Fuel Rate: mm/stroke@peak torque	45,7	45,7	45,7	45,7	
6.Torque @ RPM (SEA Gross)	148,2@2000	148,2@2000	148,2@2000	148,2@2000	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	28,9	27	25	23,9	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	43,4	43,4	43.4	43.2	
3.BHP@RPM r (SAE Gross)	67@3000	66.3@2800	63 9@2600	63.8@2500	
2.Engine Model	TD2009L04	TD2009L04	5	TD2009L04	
1.Engine Code 2.Engine Mod	CESO	CE49.5	7 7 7 7	CE47.6	0, 1410