EXECUTIVE ORDER U-R-013-0156 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) 8000						
2005	5DZXL06.5043	6.5, 5.4, 4.3, 3.2	Diesel							
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
Direct Dies	el Injection, Smoke Puff	Limiter, Turbocharger	Pump							

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 CLASS	EMISSION STANDARD			E	XHAUST (g/kW-l		OPACITY (%)				
	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	-	-	6.7	2.4	0.30	2	2	2	

**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 October 2004.

Allen Lyons, Chief

Mobile Source Operations Division

## Engine Model Surmary Form

Deutz AG Manufacturer:

Engine category:

Nonroad CI 5DZXL06.5043 EPA Engine Family.

Mfr Family Name: BFL914

Running Change Process Code:

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8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	SPL Dyr F	-	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	Action of the second of the se	SPL	SPL	JdS	1dS	EM	W	A THE OWNER OF THE PARTY OF THE	EM	FM	
8.Fuel Rate: (lbs/hr)@peak torqu	21,3	23,1	27	29.8	31,9	31.9	31,9	31,9	31,9	31,2	29.8	28.4	31.2	29,8	28,4	0	0	0	0	0	
7.Fuel Rate: mm/stroke@peak torque	80	87	, 76	84	06	06	(06)	06	06	88	. 84	80	88	84	80	0	0	0	0	0	
6.Torque @ RPM (SEA Gross)	179,3@1600	197,8@1600	237,1@1600	253,1@1600	265,5@1600	265,5@1600	265,5@1600	254,4@1600	243,3@1600	265,5@1600	254,4@1600	243,3@1600	265,5@1600	254,4@1600	243,3@1600	FIXED	FIXED	FIXED	FIXED	FIXED	The state of the s
5.Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	24,9	28,7	33,2	36,2	41,6	41,6	38,3	36,5	35	38,6	36,7	35,8	35,5	34,2	32,4	35,5	36	35,5	39,1	39,9	
4.ruel Kate: mm/stroke @ peak HP (for diesel only)	65	75	65	7.1	75	75	75	71,5	68,5	81	77	75	. 80	11	73	89	88	80	80	75	法法 人名英格兰人姓氏克尔
3.BHP@RPM (SAE Gross)	ના,' 64,9@2300	74,2@2300	85,1@2300	94,5@2300	100,4@2500	100,4@2500	<sub>7</sub> ዛ·ነ 100,4@2300	95,8@2300	91,8@2300	96,6@2150	92,6@2150	88,6@2150	92,1@2000	88,1@2000	82,7@2000	91,4@1800	91,5@1846	92,1@2000	96,9@2200	97,6@2400	
2.Engine Model	BF3L914	BF3L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	BF4L914	
1.Engine Code	CE44	CE51	CE59	CE66	CE71,7	CE71,7/1	U CE72,4	CE69	CE66/1	CE70	CE67	CE64.	CE67/1	CE64/1	CE60	DE67	DE67/1	DE67/2	DE70	DE70/1	