

 <b>AIR RESOURCES BOARD</b>	<b>DEUTZ AG</b>	<b>EXECUTIVE ORDER U-R-013-0156</b> 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)
2005	5DZXL06.5043	6.5, 5.4, 4.3, 3.2	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel 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 CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	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 28<sup>TH</sup> day of October 2004.



Allen Lyons, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

Attachment 10821  
 U-R-013-0156

Manufacturer: Deutz AG  
 Engine category: Nonroad CI  
 EPA Engine Family: 5DZXL06.5043  
 Mfr Family Name: BFL914  
 Process Code: Running Change

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.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
CE44	BF3L914	64,9@2300	65	24,9	179,3@1600	80	21,3	SPL
CE51	BF3L914	74,2@2300	75	28,7	197,8@1600	87	23,1	SPL
CE59	BF4L914	85,1@2300	65	33,2	237,1@1600	76	27	SPL
CE66	BF4L914	94,5@2300	71	36,2	253,1@1600	84	29,8	SPL
CE71,7	BF4L914	100,4@2500	75	41,6	265,5@1600	90	31,9	SPL
CE71,7/1	BF4L914	100,4@2500	75	41,6	265,5@1600	90	31,9	SPL
CE72,4	BF4L914	100,4@2300	75	38,3	265,5@1600	90	31,9	SPL
CE69	BF4L914	95,8@2300	71,5	36,5	254,4@1600	90	31,9	SPL
CE66/1	BF4L914	91,8@2300	68,5	35	243,3@1600	90	31,9	SPL
CE70	BF4L914	96,6@2150	81	38,6	265,5@1600	88	31,2	SPL
CE67	BF4L914	92,6@2150	77	36,7	254,4@1600	84	29,8	SPL
CE64	BF4L914	88,6@2150	75	35,8	243,3@1600	80	28,4	SPL
CE67/1	BF4L914	92,1@2000	80	35,5	265,5@1600	88	31,2	SPL
CE64/1	BF4L914	88,1@2000	77	34,2	254,4@1600	84	29,8	SPL
CE60	BF4L914	82,7@2000	73	32,4	243,3@1600	80	28,4	SPL
DE67	BF4L914	91,4@1800	89	35,5	FIXED	0	0	EM
DE67/1	BF4L914	91,5@1846	88	36	FIXED	0	0	EM
DE67/2	BF4L914	92,1@2000	80	35,5	FIXED	0	0	EM
DE70	BF4L914	96,9@2200	80	39,1	FIXED	0	0	EM
DE70/1	BF4L914	97,6@2400	75	39,9	FIXED	0	0	EM