

 AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0155
		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	5DZX06.5037	6.472	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			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):

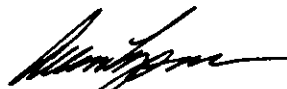
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	-	-	6.2	1.2	0.21	3	4	7

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 20TH day of September 2004.



Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: Deutz AG
Engine category: Nonroad CI
EPA Engine Family: 5DZXL06.5037
Mfr Family Name: BF6L914C
Process Code: New Submission

Attachment 1 of 1
U-2-013-0155

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
CE118/5	BF6L914C	168,4@2300	80	61,3	453,6@1600	89	47,4	SPL
CE118/6	BF6L914C	167,2@2300	79	60,5	452,1@1600	89	47,4	SPL
CE118/7	BF6L914C	166,5@2150	83	59,4	497,8@1600	101	5,3	SPL
CE118/8	BF6L914C	165,5@2150	82	58,7	496,3@1600	100	53,3	SPL
CE112/2	BF6L914C	158,5@2150	79	56,6	453,6@1600	89	47,4	SPL
CE112/3	BF6L914C	157,5@2150	78	55,8	452,1@1600	89	47,4	SPL
CE121/2	BF6L914C	168,9@2000	89	59,3	497,8@1600	99	52,7	SPL
CE121/3	BF6L914C	168,1@2000	88	58,6	496,3@1600	99	52,7	SPL
CE114/2	BF6L914C	159,6@2000	85	56,6	453,6@1600	89	47,4	SPL
CE114/3	BF6L914C	158,7@2000	84	55,9	452,1@1600	89	47,4	SPL
CE108/2	BF6L914C	151,5@2000	80	53,3	453,6@1600	89	47,4	SPL
CE108/3	BF6L914C	150,7@2000	79	52,6	452,1@1600	89	47,4	SPL
CE111/2	BF6L914C	153,7@1800	89	53,3	475,7@1600	95	50,6	SPL
CE111/3	BF6L914C	153,1@1800	88	52,7	527,3@1600	95	50,6	SPL
CE105/2	BF6L914C	145,7@1800	86	51,5	453,6@1600	89	47,4	SPL
CE105/3	BF6L914C	145,1@1800	85	50,9	452,1@1600	89	47,4	SPL
CE99/2	BF6L914C	137,6@1800	82	49,1	453,6@1600	89	47,4	SPL
CE99/3	BF6L914C	137@1800	81	48,5	452,1@1600	89	47,4	SPL