

California Environmental Protection Agency 	DEUTZ AG	EXECUTIVE ORDER U-R-013-0453 New Off-Road Compression-Ignition Engines
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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 systems 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)
2013	DDZX07.1005	7.146	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter, Selective Catalytic Reduction-Urea			Loader, Dozer, and Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NO<sub>x</sub>), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO<sub>x</sub>), 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 (%)		
			NMHC	NO <sub>x</sub>	NMHC+NO <sub>x</sub>	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 560	Interim Tier 4/ ALT NO <sub>x</sub>	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.06	1.7	--	0.1	0.02	--	--	--

**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 8<sup>th</sup> day of February 2013.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

Deutz AG  
Nonroad CI

**Engine Model Summary Template**

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EO# U-R-013-0453

Date: 1/22/2013

Engine Family	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@pe ak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
DDZXL07.1005	C4SI235	TAD765VE	315.1@2200	157	115.1	981	191	92.3	DDI, TC, CAC, ECM, SPL, SCR
DDZXL07.1005	C4SI225	TAD764VE	301.7@2200	148	108.5	940.4	179	86.5	DDI, TC, CAC, ECM, SPL, SCR
DDZXL07.1005	C4SI210	TAD763VE	281.6@2200	138	101.2	886.5	167	80.7	DDI, TC, CAC, ECM, SPL, SCR
DDZXL07.1005	C4SI185	TAD762VE	248.0@2200	124	90.9	868.8	164	79.3	DDI, TC, CAC, ECM, SPL, SCR
DDZXL07.1005	C4SI160	TAD761VE	214.6@2200	111	81.4	865.2	164	79.3	DDI, TC, CAC, ECM, SPL, SCR
DDZXL07.1005	C4SI155	TAD561VE	214.6@2200	151	115.8	613.7	179	86.5	DDI, TC, CAC, ECM, SPL, SCR