## California Environmental Protection Agency Air Resources Board

**DEUTZ AG** 

EXECUTIVE ORDER U-R-013-0485-1 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-14-012;

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)				
2015	FDZXL06.1061	6.057	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT			
Cooler	Rail Direct Injection, Turb , Electronic Control Mod lation, Continuous Trap Catalytic Reduction	lule, Exhaust Gas Oxidizer, Selective	Tractor, Pump			

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 (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 STANDARD CLASS CATEGORY		Section 1	NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
	,	CERT	0.04	0.25		0.04	0.01		,	

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.

This Executive Order hereby supersedes Executive Order U-R-013-0485 dated March 6, 2014.

Executed at El Monte, California on this

day of August 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Deutz AG Nonroad CI

## **Engine Model Summary Template**

Attachment page 1 of 1

EO#U-R-013-0485-1 Date: 12/10/2015

Engine Family		2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	(lbs/hr) @ peak HP (for diesels only)		7.Fuel Rate: mm/stroke@pe ak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
FDZXL06.1061	CFWT120U	TCD6.1L6	160.9@2100	86.8	60.8	545.1@1500	108.1	54.0	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
FDZXL06.1061	CFWT106U	TCD6.1L6	142.1@2100	77.3	54.1	489.7@1500	97.1	48.5	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
<b>★</b> FDZXL06.1061	CFWT119U	TCD6.1L6	160.7@2100	84.5	59.1	515.5@1400	101.2	47.2	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
<b>⋠</b> FDZXL06.1061	CFWT109U	TCD6.1L6	146.8@2100	75,5	52.8	489.0@1400	96.0	44.7	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
<b>♦</b> FDZXL06.1061	CFWT107U	TCD6.1L6	142.1@2100	76.5	53.5	479.4@1400	95.0	44.3	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U

& new engine codes