DEUTZ AG

EXECUTIVE ORDER U-R-013-0411-1 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-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)			
2012	CDZXL06.1006	6.057	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Cooler, El	Rail Direct Injection, Turb ectronic Control Module Selective Catalytic Redu	, Smoke Puff Limiter,	Tractor				

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS			NMHC	NOx	NMHC+NOx	co	РМ	ACCEL	LUG	PEAK
130 <u><</u> kW < 560	Interim Tier 4 / ALT NO _x	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.11	1.7		0.3	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.

This Executive Order hereby supersedes Executive Order U-R-013-0411 dated October 28, 2011.

Executed at El Monte, California on this

day of February 2012

Annette Hebert, Chief

Mobile Source Operations Division

Deutz AG Nonroad CI Engine Mode

Attachment

Jummary Template

page 1 of

2/13/2012

EO# U-R-013 0411-1

5.Fuel Rate: 4.Fuel Rate: (lbs/hr) @ peak

7.Fuel Rate: 8.Fuel Rate: mm/stroke @ peak HP 6.Torque @ RPM mm/stroke@pe HP (lbs/hr)@peak 9.Emission Control 3.BHP@RPM (for diesels 2.Engine Model **Engine Family** 1.Engine Code ak torque Device Per SAE J1930 (SEA Gross) torque (SAE Gross) (for diesel only) only) CDZXL06.1006 C4ST175U TCD6.1L6 233.6@2100 83.9 790.5@1500 156.0 77.9 DDI, TC, CAC, ECM, SPL, SCR, 120.0 738.9@1500 146.0 77.6 72.9 DDI, TC, CAC, ECM, SPL, SCR, TCD6.1L6 218.3@2100 111.0 CDZXL06.1006 C4ST163U 671.8@1500 130.0 DDI, TC, CAC, ECM, SPL, SCR, 71.3 CDZXL06.1006 C4ST148U TCD6.1L6 198.6@2100 102.0 64.9 C4ST133U TCD6.1L6 178.3@2100 91.0 63.6 603.3@1500 115.0 57.4 DDI, TC, CAC, ECM, SPL, SCR, CDZXL06.1006