EXECUTIVE ORDER U-R-013-0390 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)		
2011	BDZXL04.8071	4.764	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION		
Mechanical Direct Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Exhaust Gas Recirculation			Loaders, Tractor, Dozer, Pump, Compressor, Other Industrial Equipment			

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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS	STANDARD		НС	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
75 < kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT			3.8	1.7	0.22	17	4	24

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

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Annette Hebert, Chief

Mobile Source Operations Division

Deutz AG Nonroad CI

Engine Model Summary Template

Attachment

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E0#U-R-013-0390 4/18/2011

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
BDZXL04.8071	C3MI104	TCD2013L04	139,4@2200	115	56.2	416.7@1500	132	44.0	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI93	TCD2013L04	124,7@2300	101	51.6	361.4@1500	110	36.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI99	TCD2013L04	132,7@2200	110	53.7	361.4@1500	110	36.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI87	TCD2013L04	116,6@2100	100	46.6	361.4@1500	110	36.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI88	TCD2013L04	118@2300	97	49.5	342.9@1500	105	35.0	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI95	TCD2013L04	127,3@2200	106	51.8	342.9@1500	105	35.0	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI83	TCD2013L04	111,3@2100	95	44.3	342.9@1500	105	35.0	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI83A	TCD2013L04	111,3@2300	91	46.5	324.5@1500	98	32.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI90	TCD2013L04	120,6@2200	100	48.8	324.5@1500	98	32.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI81	TCD2013L04	108,6@2200	90	43.9	309.7@1500	93	31.0	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI87	D5DCBE3	116,6@2200	97	47.4	361.4@1500	110	36.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI99	D5DGAE3	132,7@2200	110	53.7	361.4@1500	110	36.7	DDI, TC, CAC, SPL, EGR
BDZXL04.8071	C3MI88	D5DGBE3	118@2300	97	49.5	342.9@1500	105	35.0	DDI, TC, CAC, SPL, EGR