## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0414-2 New Off-Road Compression-lanition 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	CDZXL06.1022	6.057	Diesel	8000
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLIC	
SFLCIAL	PEATORES & EMISSION V	CONTROL STSTEMS	TTFICAL EQUIPMENT AFFLIC	ATION
Common I Cooler, E	Rail Direct Injection, Turb lectronic 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			EX	HAUST (g/kw-hi	)		OP	ACITY (	%)
POWER CLASS	CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 <u>&lt;</u> 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	0.09	1.7		0.4	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-013-0414-1 dated February 28, 2012.

Executed at El Monte, California on this \_\_\_\_\_/C

Annette Hebert, Chief

Mobile Source Operations Division

Deutz AG

Nonroad CI

Attachment

九0年0-8-013-0414-2

6/18/2012

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## **Engine Model Summary Template**

7.Fuel Rate: 8.Fuel Rate: 5.Fuel Rate: (lbs/hr) @ peak mm/stroke @ peak HP

C4ST159U TCD6.1L6 213.2@2100 109 76.2 970@1450 136.5 66.0	DDI, TC, CAC, ECM, SPL, SCR	(lbs/hr)@pe torque 81.1 78.5 71.8 66.0	ak torque 168 162.5 148.5 136.5	(for diesels only)         6.Torque @ RPM mm/stroke@pe (bs/hr)@peak ak torque torque g7.9         (SEA Gross)         ak torque torque torque ak torque ak torque torque torque ak torque torque torque torque torque ak torque torque torque torque torque ak torque	(for diesels only) 97.9 91.3 83.6 76.2	(for diesel only)  140  130.5  119.5		2.Engine Model TCD6.1L6 TCD6.1L6 TCD6.1L6	1.Engine Code C4ST203U C4ST188U C4ST174U C4ST159U	Engine Family  CDZXL06.1022  CDZXL06.1022  CDZXL06.1022
	DDI, TC, CAC, ECM, SPL, SCR	60.4	125	878@1450	69.6	99.5	193.1@2100	TCD6.1L6	C4ST144U	CDZXL06.1022
	DDI, TC, CAC, ECM, SPL, SCR	71.8	148.5	1055@1450	83.6	119.5	233.3@2100	TCD6.1L6	C4ST174U	1022
C4ST174U TCD6.1L6 233.3@2100 119.5 83.6 1055@1450					>	0	202: 100	כביי.	04011000	. 1022
C4ST174U TCD6.1L6 233.3@2100 119.5 83.6 1055@1450 148.5	DDI, TC, CAC, ECM, SPL, SCR	78.5	162.5	1135@1450	91.3	130.5	252 1@2100	TCD6 11.6	C4ST18811	3 1022
C4ST188U TCD6.1L6 252.1@2100 130.5 91.3 1135@1450 162.5 C4ST174U TCD6.1L6 233.3@2100 119.5 83.6 1055@1450 148.5	DDI, TC; CAC, ECM, SPL, SCR	81.1	168	1171@1450	97.9	140	272.2@2100	TCD6.1L6	C4ST203U	3,1022
C4ST203U         TCD6.1L6         272.2@2100         140         97.9         1171@1450         168           C4ST188U         TCD6.1L6         252.1@2100         130.5         91.3         1135@1450         162.5           C4ST174U         TCD6.1L6         233.3@2100         119.5         83.6         1055@1450         148.5		torque	ak torque	(SEA Gross)	only)	(for diesel only)		2.Engine Model	1.Engine Code	Family
1.Engine Code       2.Engine Model       (SAE Gross)       (for diesel only)       only)       (SEA Gross)       ak torque         C4ST203U       TCD6.1L6       272.2@2100       140       97.9       1171@1450       168         C4ST188U       TCD6.1L6       252.1@2100       130.5       91.3       1135@1450       162.5         C4ST174U       TCD6.1L6       233.3@2100       119.5       83.6       1055@1450       148.5		(lbs/hr)@pe	nm/stroke@pe	6.Torque @ RPM <sup>r</sup>	(for diesels	HP (# PAGE)	3.BHP@RPM			