California Environmental Protection Agency AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0340 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)
2010	ADZXL04.1069	4.038	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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT	--	--	4.4	0.7	0.09	12	4	22

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 27 day of January 2010.

Annette Hebert, Chief
Mobile Source Operations Division

Deutz AG
Nonroad CI

Engine Model Summary Template

Attachment page 1 of 1

EO# U-R-013-0340
12/29/2009

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@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
ADZXL04.1069	C3MT73	TCD2012L04	97,8@2300	78	39.8	281,7@1600	087	30.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT75	TCD2012L04	100.4@2300	78	39.8	293,6@1600	90	31.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT66	TCD2012L04	88,7@2200	68	33.2	267,7@1600	82	29.1	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT75A	TCD2012L04	100,4@2200	79	38.6	289,1@1600	89	31.6	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT75B	TCD2012L04	100,4@2200	79	38.6	302,6@1600	93	33.0	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74	TCD2012L04	100,4@2400	76	40.5	283,9@1550	95	33.7	DDI, TC,CAC, SPL, EGR
ADZXL04.1069	C3MI74A	TCD2012L04	100,4@2300	78	39.8	283,9@1550	95	33.7	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74B	TCD2012L04	100,4@2200	79	38.6	283,9@1550	95	33.7	DDI, TC, CAC,SPL, EGR
ADZXL04.1069	C3MI74C	TCD2012L04	100,4@2100	82	38.2	283,9@1550	95	33.7	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74D	TCD2012L04	100,4@2000	87	38.6	283,9@1550	95	33.7	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74E	TCD2012L04	100,4@2400	76	40.5	276,5@1550	91	32.3	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74F	TCD2012L04	100,4@2300	78	39.8	276,5@1550	91	32.3	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74G	TCD2012L04	100,4@2200	79	38.6	276,5@1550	91	32.3	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74H	TCD2012L04	100,4@2100	82	38.2	276,5@1550	91	32.3	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74J	TCD2012L04	100,4@2000	87	38.6	276,5@1550	91	32.3	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74K	TCD2012L04	100,4@2400	76	40.5	264@1550	87	30.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI72	TCD2012L04	96,5@2300	72	36.7	264@1550	87	30.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI72A	TCD2012L04	96,5@2200	76	37.1	264@1550	87	30.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI70	TCD2012L04	93,8@2000	79	35.1	264@1550	87	30.9	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI70A	TCD2012L04	93,8@2200	70	34.2	250,7@1550	82	29.1	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI67	TCD2012L04	89,8@2000	67	29.7	250,7@1550	82	29.1	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI68	TCD2012L04	91,1@2200	68	33.2	250,7@1550	82	29.1	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT72	TCD2012L04	97.2@2300	75	38.3	280.4@1600	91	31.2	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MI74M	TCD2012L04	100,4@2400	79	42.1	309.7@1600	95	33.7	DDI, TC, CAC, SPL, EGR
ADZXL04.1069	C3MT74A	TCD2012L04	100,4@2300	78	39.8	295.0@1600	91	32.3	DDI, TC, CAC, SPL, EGR