

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 system 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)
2004	4DZXLO3.1040	3.108	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Loader, Pump	

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
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50
		CERT	-	-	6.6	1.9	.26	4	5	5

**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 3<sup>rd</sup> day of October 2003.

*Raphael Sasonovitz*  
 for Allen Lyons, Chief  
 Mobile Source Operations Division

**ENGINE MODEL SUMMARY FORM**

Manufacturer: DEUTZ AG  
 Engine Category: Nonroad CI  
 EPA Family Name: DZXL03.1040  
 Mfr. Family Name: F4L/M2011, D3D  
 Process Code: New Submission

U-P-013-012-1

1. Engine code	2. Engine Model	3. BHP@ RPM	4. Fuel Rate @ Rated Power (mm <sup>3</sup> /stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque (Nm) @ RPM	7. Peak Torque (mm <sup>3</sup> /stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE39	F4L2011	52 2300	39.5	18	180	1700	15	EM b d f
CE39,9	F4L2011	53 2300	41.8	19	180	1700	15	EM
CE42	F4L2011	56 2300	43.5	20	190	1700	16	EM
X CE43,5	F4L2011	58 2300	46.0	20	190	1700	16	EM
CE41,8	F4L2011	56 2500	40.5	20	180	1700	15	EM
CE44	F4L2011	59 2500	43.0	21	190	1700	16	EM
CE42,9	F4L2011	57 2600	40.2	20	180	1700	15	EM
CE45,2	F4L2011	61 2600	42.8	21	190	1700	16	EM
CE45,8	F4L2011	61 2650	42.8	21	190	1700	16	EM
CE45,4	F4L2011	61 2800	41.0	21	180	1700	15	EM
CE47,8	F4L2011	64 2800	42.5	22	190	1700	16	EM
CE37	F4M2011	50 2300	37.5	17	185	1700	15	EM
CE40,4	F4M2011	54 2300	41.5	19	185	1700	15	EM
CE42,5	F4M2011	57 2300	44.3	20	190	1700	16	EM
CE44/1	F4M2011	59 2400	44.5	21	190	1700	16	EM
CE42,7	F4M2011	57 2500	41.5	20	185	1700	15	EM
CE45	F4M2011	60 2500	44.5	21	190	1700	16	EM
CE44,6	F4M2011	60 2600	42.0	21	185	1700	15	EM
CE46,5	F4M2011	62 2600	44.5	22	190	1700	16	EM
CE46,1	F4M2011	62 2800	41.9	22	185	1700	15	EM
CE48,5	F4M2011	65 2800	44.5	23	190	1700	16	EM
CE47,5	F4M2011	64 2700	44.5	22	190	1700	16	EM
CE46,5	F4L2011	62 2700	43.5	22	190	1700	16	EM
CE39,9/1	D3DCAE2	53 2300	41.0	19	180	1700	15	EM
CE43,5/1	D3DCBE2	58 2300	46.0	20	190	1700	16	EM
CE45,2/1	D3DCCCE2	61 2600	42.5	21	190	1700	16	EM