

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)
2003	3DZX02.9012	2.2, 2.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger			Pump, Compressor, Loader, 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):

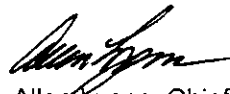
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	-	7.3	-	-	-	8	2	25

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 9TH day of December 2002.



Allen Lyons, Chief
Mobile Source Operations Division

Attachment 1 of 2

Manufacturer: DEUTZ AG
 Engine Category: Nonroad CI
 EPA Family Name: 3DDXL02.9012
 Mfr. Family Name: BF3L1011FL
 Process Code: New Submission

ENGINE MODEL SUMMARY FORM

U-R-013-0100

1. Engine code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm ³ /stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)	7. Peak Torque (mm ³ /stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
C37	BF3L1011FL	50	2500	47.5	17.4	153	50.0	13.5	EM DDF, SP4, TC
C37/1	BF3L1011FL	50	2300	48.0	17.4	162	53.0	14.3	EM
C38	BF3L1011FL	51	2650	50.0	17.8	154	50.0	13.6	EM
C38/1	BF3L1011FL	51	2800	50.0	17.8	150	49.0	13.3	EM
C39	BF3L1011FL	52	2500	49.0	18.3	163	53.0	14.4	EM
C39.5	BF3L1011FL	53	2600	51.5	18.5	162	53.0	14.3	EM
C40	BF3L1011FL	54	2650	51.5	18.8	162	53.0	14.3	EM
C40/2	BF3L1011FL	54	2800	51.0	18.8	156	50.0	13.8	EM
C42/1	BF3L1011FL	56	2800	52.5	19.7	164	53.0	14.5	EM
C37.4	BF3M1011F	50	2300	50.5	17.5	169	53.0	15.0	EM
C39.4	BF3M1011F	53	2300	52.5	18.5	177	56.0	15.7	EM
C40/1	BF3M1011F	54	2500	51.0	18.8	172	54.0	15.2	EM
C41.6	BF3M1011F	56	2650	51.5	19.5	172	54.0	15.2	EM
C42	BF3M1011F	56	2500	53.0	19.7	179	57.0	15.8	EM
C43.5	BF3M1011F	58	2800	52.5	20.4	174	55.0	15.4	EM
C43.6	BF3M1011F	58	2650	53.5	20.4	179	57.0	15.8	EM
C44.2	BF3M1011F	59	2700	54.0	20.7	179	57.0	15.8	EM
C45.5	BF3M1011F	61	2800	54.5	21.3	182	58	16.1	EM
C44.4	BF4M1011F	67	2000	50.5	23.5	220	51	19.5	EM
C47	BF4M1011F	67	2000	53.0	23.5	232	54.5	20.5	EM
C48.5	BF4M1011F	67	2300	48.5	23.5	222	51.5	19.6	EM
C50.1	BF4M1011F	67	2300	51.5	23.5	230	54	20.3	EM
C52.7	BF4M1011F	71	2300	53.5	24.7	238	56.5	21.1	EM
C53.5	BF4M1011F	72	2500	51.0	25.1	235	55.5	20.8	EM
C53.6	BF4M1011F	72	2350	53.5	25.1	239	57	21.1	EM
C55.8	BF4M1011F	75	2650	52.0	26.2	240	57	21.2	EM
C56.2	BF4M1011F	75	2500	54.0	26.4	244	58.5	21.6	EM
C58	BF4M1011F	78	2750	53.0	27.2	245	59	21.7	EM
C58.2	BF4M1011F	78	2800	53.0	27.3	245	58.5	21.7	EM
C58.4	BF4M1011F	78	2650	54.5	27.4	249	59.0	22.0	EM
C58/1	BF4M1011F	78	3000	52.0	27.2	245	58.5	21.7	EM
C61	BF4M1011F	82	2800	55.0	28.6	255	60	22.6	EM

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Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 3DZXLO2.9012
Mfr. Family Name: BF3L1011FL
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

U-R-013-01 20

1. Engine code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm ³ /stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)	7. Peak Torque (mm ³ /stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
D45,6	BF4M1011F	61	1800	48.0	21.4	N/A	N/A	N/A	EM, DDI, SPL, TC
D48	BF4M1011F	64	1800	50.5	22.5	N/A	N/A	N/A	EM, L