

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-13-9

(-13-10 for '97)

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DEUTZ CORPORATION GmbH

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 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-45-9;

IT IS ORDERED AND RESOLVED: That the following Deutz Corporation GmbH 1997 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Genset

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
VDZ7.1R6DARB	7.15	(436)	Turbocharger Smoke Puff Limiter Charge Air Cooler

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

<u>Exhaust Emissions (g/bhp-hr)</u>				<u>Smoke Opacity (%)</u>		
<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

<u>Exhaust Emissions (g/bhp-hr)</u>				<u>Smoke Opacity (%)</u>		
<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
0.3	0.8	6.3	0.1	6	4	10

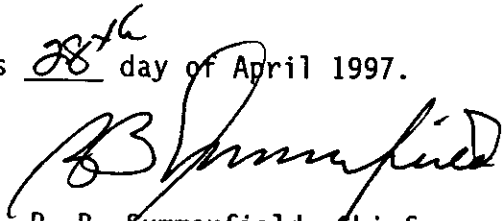
BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 28th day of April 1997.



R. B. Summerfield, Chief
Mobile Source Operations Division

61	BF6M1013	C126	126	2300	9.20	84	627	11.03	1400	700	2400	02111335KZ	02126998KZ	04201253UA	7	81-800	02111252UA	04202410EA	0420234
62	BF6M1013	C119	119	2300	8.69	80	593	10.43	1400	700	2400	02111335KZ	02126998KZ	04201253UA	7	79-800	02111252UA	04202410EA	0420234
	BF6M1013	C136	136	2200	10.38	93	697	12.26	1400	700	2300	02111335KZ	02126998KZ	04201253UA	7	85-800	02111252UA	04202410EA	0420234
	BF6M1013	C129	129	2200	9.85	89	662	11.64	1400	700	2300	02111335KZ	02126998KZ	04201253UA	7	83-800	02111252UA	04202410EA	0420234
65	BF6M1013	C122	122	2200	9.31	84	627	11.03	1400	700	2300	02111335KZ	02126998KZ	04201253UA	7	81-800	02111252UA	04202410EA	0420234
66	BF6M1013	C116	116	2200	8.85	80	593	10.43	1400	700	2300	02111335KZ	02126998KZ	04201253UA	7	79-800	02111252UA	04202410EA	0420234
67	BF6M1013	C131	131	2100	10.48	93	697	12.26	1400	700	2180	02111335KZ	02126998KZ	04201253UA	7	85-800	02111252UA	04202410EA	0420234
68	BF6M1013	C125	125	2100	10.00	89	662	11.64	1400	700	2180	02111335KZ	02126998KZ	04201253UA	7	83-800	02111252UA	04202410EA	0420234
69	BF6M1013	C118	118	2100	9.44	84	627	11.03	1400	700	2180	02111335KZ	02126998KZ	04201253UA	7	81-800	02111252UA	04202410EA	0420234
70	BF6M1013	C112	112	2100	8.96	80	593	10.43	1400	700	2180	02111335KZ	02126998KZ	04201253UA	7	79-800	02111252UA	04202410EA	0420234
71	BF6M1013	C120	120	2000	10.08	89	662	11.64	1400	700	2180	02111335KZ	02126998KZ	04201253UA	7	83-800	02111252UA	04202410EA	0420234
72	BF6M1013	C114	114	2000	9.57	85	627	11.03	1400	700	2080	02111335KZ	02126998KZ	04201253UA	7	81-800	02111252UA	04202410EA	0420234
73	BF6M1013	C108	108	2000	9.07	80	593	10.43	1400	700	2080	02111335KZ	02126998KZ	04201253UA	7	79-800	02111252UA	04202410EA	0420234
74	BF6M1013	D137	137	2000	9.59	89	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02111454KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
75	BF6M1013	D124	124	2400	8.68	81	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02111454KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
76	BF6M1013	D133	133	2000	11.17	97	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
77	BF6M1013	D121	121	2000	10.16	89	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
78	BF6M1013	D128	128	1846	11.64	101	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
79	BF6M1013	D117	117	1846	10.64	91	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
80	BF6M1013	D118	118	1800	11.01	95	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
81	BF6M1013	D112	112	1800	10.45	90	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
82	BF6M1013	D107	107	1800	9.98	86	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04201253UA	6	n.a.	02111252UA	04202410EA	0420234
83	BF4M1013	C93	93	2300	10.19	93	464	12.24	1400	700	2400	02111335KZ	02126998KZ	04202094UA	7	85-800	02111252UA	04204775EA	0420473
84	BF4M1013	C88	88	2300	9.64	88	438	11.56	1400	700	2400	02111335KZ	02126998KZ	04202094UA	7	83-800	02111252UA	04204775EA	0420473
85	BF4M1013	C84	84	2300	9.20	84	418	11.03	1400	700	2400	02111335KZ	02126998KZ	04202094UA	7	81-800	02111252UA	04204775EA	0420473
86	BF4M1013	C79	79	2300	8.65	79	394	10.40	1400	700	2400	02111335KZ	02126998KZ	04202094UA	7	79-800	02111252UA	04204775EA	0420473
87	BF4M1013	C90	90	2200	10.30	93	464	12.24	1400	700	2300	02111335KZ	02126998KZ	04202094UA	7	85-800	02111252UA	04204775EA	0420473
88	BF4M1013	C86	86	2200	9.85	89	438	11.56	1400	700	2300	02111335KZ	02126998KZ	04202094UA	7	83-800	02111252UA	04204775EA	0420473
89	BF4M1013	C81	81	2200	9.27	84	418	11.03	1400	700	2300	02111335KZ	02126998KZ	04202094UA	7	81-800	02111252UA	04204775EA	0420473
90	BF4M1013	C77	77	2200	8.82	80	394	10.40	1400	700	2300	02111335KZ	02126998KZ	04202094UA	7	79-800	02111252UA	04204775EA	0420473
91	BF4M1013	C87	87	2100	10.44	93	464	12.24	1400	700	2180	02111335KZ	02126998KZ	04202094UA	7	85-800	02111252UA	04204775EA	0420473
92	BF4M1013	C83	83	2100	9.96	89	438	11.56	1400	700	2180	02111335KZ	02126998KZ	04202094UA	7	83-800	02111252UA	04204775EA	0420473
93	BF4M1013	C79	79	2100	9.48	85	418	11.03	1400	700	2180	02111335KZ	02126998KZ	04202094UA	7	81-800	02111252UA	04204775EA	0420473
94	BF4M1013	C74	74	2100	8.88	79	394	10.40	1400	700	2180	02111335KZ	02126998KZ	04202094UA	7	79-800	02111252UA	04204775EA	0420473
95	BF4M1013	C80	80	2000	10.08	90	438	11.56	1400	700	2080	02111335KZ	02126998KZ	04202094UA	7	83-800	02111252UA	04204775EA	0420473
96	BF4M1013	C76	76	2000	9.57	85	418	11.03	1400	700	2080	02111335KZ	02126998KZ	04202094UA	7	81-800	02111252UA	04204775EA	0420473
	BF4M1013	C72	72	2000	9.07	81	394	10.40	1400	700	2080	02111335KZ	02126998KZ	04202094UA	7	79-800	02111252UA	04204775EA	0420473
	BF4M1013	D92	92	2400	9.66	90	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
99	BF4M1013	D84	84	2400	8.82	81	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
100	BF4M1013	D89	89	2000	11.21	97	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
101	BF4M1013	D80	80	2000	10.08	89	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
102	BF4M1013	D85	85	1846	11.60	100	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
103	BF4M1013	D77	77	1846	10.51	90	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	7	n.a.	02111252UA	04204775EA	0420473
104	BF4M1013	D78	78	1800	10.92	90	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	5	n.a.	02111252UA	04204775EA	0420473
105	BF4M1013	D75	75	1800	10.50	86	n.a.	n.a.	n.a.	n.a.	n.a.	02111335KZ	02126998KZ	04202094UA	5	n.a.	02111252UA	04204775EA	0420473