California Environmental Protection Agency AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0066 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-45-9;

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)
2002	2DZXL06.1009	4.1, 6.1	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger	Pump, Generator Set, 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
75≤kW<130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	-	9.0	-	-	-	12	8	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 28TH day of February 2002.

Allen Lyons, Chief
New Vehicle/Engine Programs Branch

EO# 4-R-013-0066

Attachment 1 of 2

Manufacturer: DEUTZ AG
Engine category: Nonroad CI
EPA Engine Family: 2DZXL06.1009

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BkW	Rated Power Engine Speed	Injection rate at rated power ±6mm³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque ±4mm³	Fuel injection pump	Fuel injector	Injection timing (- 1°)	Smoke limiter, part of speed governor, - 5 mm³	Turbocharger
		HP	kW	rpm	mm³/ stroke	Nm	rpm	mm³/ stroke	description	description	°btdc	mm³/ stroke-rpm	part numb.
C118	BF6L913	158	118	2500	77	539	1625	81	PES6A95D410/3RS2907	DLLA147P854	15	63 - 1000	S2B018H
C118/1	BF6L913	158	118	2500	77	539	1625	81	PES6A95D410/3RS2907	DLLA147P854	15	n. a.	S2B018H
C112	BF6L913	150	112	2500	75	511	1625	78	PES6A95D410/3RS2907	DLLA147P854	15	63 - 1000	S2B018H
C110	BF6L913	147	110	2500	74	500	1625	77	PES6A95D410/3RS2907	DLLA147P854	15	63 - 1000	S2B018H
C110/1	BF6L913	147	110	2500	74	500	1625	77	PES6A95D410/3RS2907	DLLA147P854	15	n. a.	S2B018H
C109	BF6L913	146	109	2500	73	493	1625	76	PES6A95D410/3RS2907	DLLA147P854	15	n. a.	S2B018H
C109/1	BF6L913	146	109	2500	73	493	1625	76	PES6A95D410/3RS2907	DLLA147P854	15	n. a.	S2B018H
C109/3	BF6L913	146	109	2500	73	493	1625	76	PES6A95D410/3RS2907	DLLA147P854	15	63 - 1000	S2B018H
C112/3	BF6L913	150	112	2300	77	520	1625	79	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C104	BF6L913	139	104	2300	73	482	1625	75	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
C104/4	BF6L913	139	104	2300	73	482	1625	75	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C99	BF6L913	133	99	2300	70	455	1625	71	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
C96/2	BF6L913	129	96	2200	69	458	1625	72	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C104/1	BF6L913	139	104	2150	76	508	1625	78	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C106	BF6L913	142	106	2150	77	508	1625	78	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C100	BF6L913	134	100	2150	73	478	1625	75	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
C100/1	BF6L913	134	100	2150	73	478	1625	75	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C96	BF6L913	129	96	2150	70	458	1625	72	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C101	BF6L913	135	101	2000	77	501	1625	77	PES6A95D410/3RS2907	DLLA147P854	14	63 - 1000	S2B018H
C96/1	BF6L913	129	96	2000	73	474	1625	74	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
C90	BF6L913	121	90	2000	68	442	1625	69	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
C92	BF6L913	123	92	1800	76	493	1625	76	PES6A95D410/3RS2907	DLLA147P854	14	n. a.	S2B018H
D88/1	BF6L913	118	88	1800	74	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
D92	BF6L913	123	92	1800	78	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
D116	BF6L913	155	116	1800	103	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
D113	BF6L913	151	113	1800	100	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
D107	BF6L913	143	107	1800	94	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
D102	BF6L913	137	102	1800	89	n. a.	n. a.	n. a.	PES6A95D410/3RS2907	DLLA147P854	13	n. a.	S2B018H
C74	BF6L913T	99	74.0	2200	53.0	424	1400	66	PES6A85D410/3RS2907	DLLA147P854	16	63-1000	S2B018H
C88	BF6L913T	118	88.0	2250	61	468	1500	73	PES6A85D410/3RS2907	DLLA147P854	16	63-1000	S2B018H
C103	BF6L913T	138	103.0	2250	71	512	1500	78	PES6A85D410/3RS2907	DLLA147P854	16	63-1000	S2B018H
C72/2	BF4L913	96	72	2600	70	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	14	n. a.	S2A165B
C78	BF4L913	105	78	2500	77	354	1625	81	PES4A95D410/3RS2789	DLLA147P854	14	63 - 1000	S2A165B
C78/1	BF4L913	105	78	2500	77	354	1625	81	PES4A95D410/3RS2789	DLLA147P854	14	n. a.	S2A165B

EOA4-A-013-0066

2582

Manufacturer: DEUTZ AG
Engine category: Nonroad CI
EPA Engine Family: 2DZXL06.1009

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BkW	Rated Power Engine Speed	Injection rate at rated power ±6mm³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque ±4mm³	Fuel injection pump	Fuel injector	Injection timing (- 1°)	Smoke limiter, part of speed governor, - 5 mm³	Turbocharger
		HP	kW	rpm	mm³/ stroke	Nm	rpm	mm³/ stroke	description	description	°btdc	mm³/ stroke-rpm	part numb.
C74	BF4L913	99	74	2500	73	330	1625	78	PES4A95D410/3RS2789	DLLA147P854	14	63 - 1000	S2A165B
C72	BF4L913	96	72	2500	70	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	14	n. a.	S2A165B
C72/1	BF4L913	96	72	2500	70	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	14	63 - 1000	S2A165B
C64/2	BF4L913T	86	64	2500	68	315	1400	74	PES4A95D410/3RS2789	DLLA147P875	13	n. a.	S2A165B
C76	BF4L913	102	76	2400	77	354	1625	81	PES4A95D410/3RS2789	DLLA147P854	14	63 - 1000	S2A165B
C74/1	BF4L913	99	74	2300	77	345	1625	80	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C69	BF4L913	92	69	2300	72	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C69/1	BF4L913	92	69	2300	72	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C66	BF4L913	88	66	2300	69	300	1625	70	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C66/1	BF4L913	88	66	2300	69	300	1625	70	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C68	BF4L913	91	68	2200	72	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C70	BF4L913	94	70	2150	76	340	1625	79	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C67	BF4L913	90	67	2150	73	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C64	BF4L913	86	64	2150	70	300	1625	70	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C67/1	BF4L913	90	67	2000	77	340	1625	79	PES4A95D410/3RS2789	DLLA147P854	13	63 - 1000	S2A165B
C64/1	BF4L913	86	64	2000	73	320	1625	76	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C60	BF4L913	80	60	2000	69	300	1625	70	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
C61	BF4L913	82	61	1800	78	330	1625	78	PES4A95D410/3RS2789	DLLA147P854	12	n. a.	S2A165B
C61/1	BF4L913	82	61	1800	78	330	1625	78	PES4A95D410/3RS2789	DLLA147P854	12	63 - 1000	S2A165B
D70/1	BF4L913	94	70	2150	76	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
D78	BF4L913	105	78	2500	77	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	14	n. a.	S2A165B
D63/1	BF4L913	84	63	2000	72	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	13	n. a.	S2A165B
D70	BF4L913	94	70	1800	94	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	12	n. a.	S2A165B
D66,5	BF4L913	89	67	1800	84	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	12	n. a.	S2A165B
D63	BF4L913	84	63	1800	77	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	12	n. a.	S2A165B
D58	BF4L913	78	58	1800	70	n. a.	n. a.	n. a.	PES4A95D410/3RS2789	DLLA147P854	12	n. a.	S2A165B