

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	2DZXL07.1004	7.1, 4.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Compressor, 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
75≤kW<130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
130≤kW<225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.4	8.2	-	0.9	0.12	10	2	26

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

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: 2DZX107.1004

Engine Model and Part Number Summary Form

EP# U-R-013-0057

Attachment 1 of 16

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed rpm	Injection rate at rated power ±6mm ³ mm ³ /stroke	Peak torque ± 5% Nm	Speed at peak torque ± 100 rpm rpm	Injection rate at peak torque ±4mm ³ mm ³ /stroke	Fuel injection		Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm ³ - 5mm ³ stroke rpm	Turbocharger part numb
									Fuel injection pump	Fuel injector				
C190/3	BF6M1013FC	255	190	2400	120	967	1500	139	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C191	BF6M1013FC	256	191	2350	123.0	1010	1750	145	PFM1P100S/DLLA158P69	DLLA158P69	8	EMR	103-800	S2B155L
C169	BF6M1013FC	226	169	2350	110.0	893	1750	123	PFM1P100S/DLLA158P69	DLLA158P69	8	EMR	103-800	S2B155L
C200	BF6M1013FC	268	200	2300	127	1050	1500	151	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C200/1	BF6M1013FC	268	200	2300	133	1050	1400	144	02111930KZ	02112387KZ	8	EMR	103-800	S2BG139H
C223	BF6M1013FC	299	223	2300	138	1000	1700	138	02111930KZ	02112389KZ	8	EMR	90-800	S2B193L
C220	BF6M1013FC	295	220	2300	136	1050	1875	145	02112860KZ	02112389KZ	8	EMR	90-800	S2B193L
C215	BF6M1013FC	288	215	2300	136	1039	1875	145	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C190	BF6M1013FC	255	190	2300	121	1008	1500	145	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C190/1	BF6M1013FC	255	190	2300	126	1008	1400	139	02111930KZ	02112387KZ	8	EMR	103-800	S2BG139H
C212	BF6M1013FC	284	212	2300	131	952	1700	133	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C206	BF6M1013FC	284	206	2300	128	952	1700	133	02111930KZ	02112387KZ	8	EMR	90-800	S2B193L
C195/2	BF6M1013FC	284	195	2300	121	954	1875	133	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C190/2	BF6M1013FC	284	190	2300	121	943	1875	133	02111930KZ	02112387KZ	8	EMR	90-800	S2B193L
C180	BF6M1013FC	241	180	2300	115	967	1500	139	02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C180/1	BF6M1013FC	241	180	2300	119	967	1400	133	02111930KZ	02112387KZ	8	EMR	103-800	S2BG139H
C200/2	BF6M1013FC	268	200	2300	125	903	1700	127	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C170	BF6M1013FC	228	170	2300	109	925	1500	132	02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C170/1	BF6M1013FC	228	170	2300	112	925	1400	127	02111930KZ	02112387KZ	8	EMR	103-800	S2BG139H
C203/1	BF6M1013FC	272	203	2250	126	1050	1700	146	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C198	BF6M1013FC	265	198	2250	126	1040	1700	146	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C180/4	BF6M1013FC	241	180	2250	112	1000	1700	139	02111930KZ	02112387KZ	8	EMR	90-800	S2B155L

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: 2DZXLO7.1004

Engine Model and Part Number Summary Form

EST 4-K-013-0057
 20816

Engine code	Engine Model	BHP	BkW	Rated Power Engine Speed rpm	Injection rate at rated power $\pm 5\text{mm}^3$	Peak torque $\pm 5\%$	Speed at peak torque $\pm 100\text{rpm}$	Injection rate at peak torque $\pm 4\text{mm}^3$	Fuel injection pump	Fuel injector	Injection timing ($\pm 1^\circ$)	Speed governor, optionally	Smoke limiter, part of speed governor, $\pm 5\text{mm}^3$	Turbocharger
		HP	KW	rpm	$\text{mm}^3/\text{stroke}$	Nm	rpm	$\text{mm}^3/\text{stroke}$	part numb.	part numb.	%bdc		$\text{mm}^3/\text{stroke} - \text{rpm}$	part numb.
C176/3	BF6M1013FC BF6M1013FC	236	176	2250	112	990	1700	139	02111930KZ 02112860KZ	02112387KZ	8	EMR	90-800	S2B155L
C236/1	BF6M1013FC	299	223	2200	141	1050	1700	145	02111930KZ 02112860KZ	02112389KZ	8	EMR	90-800	S2B193L
C197	BF6M1013FC	264	197	2200	127	1050	1500	151	02112860KZ 02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C197/1	BF6M1013FC	264	197	2200	132	1050	1400	144	02111930KZ 02112860KZ	02112387KZ	8	EMR	103-800	S2BG139H
C214	BF6M1013FC	287	214	2200	136	1000	1700	138	02111930KZ 02112860KZ	02112389KZ	8	EMR	90-800	S2B193L
C188	BF6M1013FC	252	188	2200	120	1008	1500	145	02111930KZ 02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C188/1	BF6M1013FC	252	188	2200	124	1008	1400	139	02111930KZ 02112860KZ	02112387KZ	8	EMR	103-800	S2BG139H
C186/3	BF6M1013FC	249	186	2200	123	1059	1500	152.00	02111930KZ 02112860KZ	DLA1A51P94	8		103-800	S2BG139H
C169/2	BF6M1013FC	230	169	2200	112.0	989	1500	141	02111930KZ 02112860KZ	DLA1A51P94	8		90-800	S2B193L
C203	BF6M1013FC	272	203	2200	129	952	1700	133	02111930KZ 02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C178	BF6M1013FC	239	178	2200	114	967	1500	139	02111930KZ 02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C178/1	BF6M1013FC	239	178	2200	118	967	1400	133	02111930KZ 02112860KZ	02112387KZ	8	EMR	103-800	S2BG139H
C192	BF6M1013FC	257	192	2200	123	903	1700	127	02111930KZ 02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C169	BF6M1013FC	226	169	2200	108	925	1500	132	02111930KZ 02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C216	BF6M1013FC	289	216	2100	141	1050	1700	145	02111930KZ 02112860KZ	02112389KZ	8	EMR	90-800	S2B193L
C194	BF6M1013FC	260	194	2100	128	1050	1500	151	02111930KZ 02112860KZ	02112387KZ	8	EMR	95-800	S2B155L
C194/1	BF6M1013FC	260	194	2100	129	1050	1400	144	02111930KZ 02112860KZ	02112387KZ	8	EMR	103-800	S2BG139H
C205	BF6M1013FC	275	205	2100	135	1000	1700	138	02112860KZ 02111930KZ	02112387KZ	8	EMR	90-800	S2B193L

Engine Model and Part Number Summary Form

35216

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel injection pump	Fuel injector	Injection limiting (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, -5mm³/stroke	Turbocharger
		HP	kW	rpm	mm³/stroke	Nm	rpm	mm³/stroke	part numb.	part numb.	%bdc		mm³/stroke	part numb.
C186	BF6M1013FC	249	186	2100	121	1008	1500	145	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C195/1	BF6M1013FC	261	195	2100	129	952	1700	133	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C176	BF6M1013FC	236	176	2100	115	967	1500	139	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C176/1	BF6M1013FC	236	176	2100	116	967	1400	133	02111930KZ	02112387KZ	8	EMR	103-800	S2BG139H
C184	BF6M1013FC	247	184	2100	122	903	1700	187	02112860KZ	02112387KZ	8	EMR	90-800	S2B193L
C167	BF6M1013FC	224	167	2100	109	925	1500	132	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C167/1	BF6M1013FC	224	167	2100	110	925	1400	127	02111930KZ	02112387KZ	8	EMR	95-800	S2B155L
C206/1	BF6M1013FC	276	206	2000	141	1050	1700	144	02112860KZ	02112387KZ	8	EMR	103-800	S2BG139H
C191/1	BF6M1013FC	256	191	2000	128	1050	1500	149	02111930KZ	02112385KZ	8	EMR	95-800	S2B155L
C191/2	BF6M1013FC	256	191	2000	127	1050	1400	143	02112860KZ	02112385KZ	8	EMR	103-800	S2BG139H
C200/3	BF6M1013FC	268	200	2000	136	1000	1700	138	02111930KZ	02112385KZ	8	EMR	90-800	S2B193L
C183	BF6M1013FC	245	183	2000	122	1008	1500	143	02112860KZ	02112385KZ	8	EMR	95-800	S2B155L
C183/1	BF6M1013FC	245	183	2000	122	1008	1400	138	02111930KZ	02112385KZ	8	EMR	103-800	S2BG139H
C186/2	BF6M1013FC	249	186	2000	126	952	1700	132	02112860KZ	02112385KZ	8	EMR	90-800	S2B193L
C174	BF6M1013FC	233	174	2000	116	967	1500	136	02111930KZ	02112385KZ	8	EMR	95-800	S2B155L
C174/1	BF6M1013FC	233	174	2000	116	967	1400	132	02111930KZ	02112385KZ	8	EMR	103-800	S2BG139H
C176/2	BF6M1013FC	236	176	2000	120	903	1700	127	02112860KZ	02112385KZ	8	EMR	90-800	S2B193L
C165	BF6M1013FC	221	165	2000	109	925	1500	129	02111930KZ	02112385KZ	8	EMR	95-800	S2B155L
C165/1	BF6M1013FC	221	165	2000	110	925	1400	128	02112860KZ	02112385KZ	8	EMR	103-800	S2BG139H
C173	BF6M1013FC	232	173	1800	122	1008	1500	143	02111930KZ	02112387KZ	7	EMR	95-800	S2B155L
C172/1	BF6M1013FC	230	172	1700	138	1008	1400	138	02112860KZ	02112385KZ	7	EMR	103-800	S2BG139H

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed rpm	Injection rate at rated power ±5mm³	Peak torque ±5%	Speed at peak torque ±100 rpm	Injection rate at peak torque ±4mm³	Fuel injection		Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm³ - rpm	Turbocharger
									part numb.	part numb.				
D197	BF6M1013FC	264	197	1800	147	n.a.	n.a.	n.a.	02111930KZ	02112385KZ	8	EMR	n.a.	S2B155L
	BF6M1013FC	228	170	1800	132	n.a.	n.a.	n.a.	02111930KZ	02112385KZ	8	EMR	n.a.	S2B155L
D173	BF6M1013FC	232	173	1800	134	n.a.	n.a.	n.a.	02111930KZ	02112385KZ	8	EMR	n.a.	S2B155L
	BF4M1013FC	163	122	1800	140	n.a.	n.a.	n.a.	02111930KZ	02112385KZ	8	EMR	n.a.	S2A162B
C125	BF4M1013FC	168	125	2200	120	672	1400	138	02111930KZ	02112387KZ	8	EMR	n.a.	S200G054J
	BF4M1013FC	163	122	2000	128	672	1400	138	02112860KZ	02112387KZ	8	EMR	n.a.	S200G054J
C119	BF4M1013FC	168	125	2300	120	672	1400	138	02111930KZ	02112387KZ	8	EMR	n.a.	S2A162C
	BF6M1013ECP	249	186	2600	110	907	1500	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C195	BF6M1013ECP	261	195	2500	118	907	1500	133	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	261	195	2300	127	954	1400	134	02112860KZ	02111700KZ	8		102-800	S2BG139H
C195/2	BF6M1013ECP	261	195	2300	125	907	1400	133	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	249	186	2300	120	897	1400	132	02112860KZ	02111700KZ	8		95-800	S2B155L
C176	BF6M1013ECP	236	176	2300	113	850	1400	125	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	252	188	2200	126	954	1400	134	02112860KZ	02111700KZ	8		102-800	S2BG139H
C188/4	BF6M1013ECP	252	188	2200	125	907	1400	133	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	240	179	2200	119	897	1400	132	02112860KZ	02111700KZ	8		95-800	S2B155L
C170	BF6M1013ECP	228	170	2200	113	850	1400	125	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	217	162	2200	108	850	1400	122	02112860KZ	02111698KZ	8		97-800	S2B147K
C182	BF6M1013ECP	244	182	2100	125	955	1400	134	02111335KZ	02111700KZ	8		95-800	S2BG139H
	BF6M1013ECP	244	182	2100	125	907	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C173	BF6M1013ECP	232	173	2100	119	897	1400	132	02111335KZ	02111700KZ	8		95-800	S2B155L
	BF6M1013ECP	232	173	2100	119	897	1400	132	02112860KZ	02111700KZ	8		95-800	S2B155L

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Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: ZDZXL07.1004

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel injection pump	Fuel injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm ² stroke	Turbocharger
		HP	KW	rpm	mm ³ /stroke	Nm	rpm	mm ³ /stroke	part numb.	part numb.	bidc		mm ² stroke	part numb.
C165	BF6M1013ECP	221	165	2100	113	850	1400	122	02111335KZ	02111698KZ	8		97-800	S2B147K
C166	BF6M1013ECP	222	166	2000	118	897	1400	129	02111335KZ	02111698KZ	8		99-800	S2B147K
C158	BF6M1013ECP	212	158	2000	112	850	1400	122	02111335KZ	02111698KZ	8		97-800	S2B147K
C161/3	BF6M1013ECP	216	161	1900	119	897	1400	132	02111335KZ	02111698KZ	8		97-800	S2B148K
C190	BF6M1013CP	255	190	2500	118	899	1500	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C190/4	BF6M1013CP	255	190	2400	124	890	1500	132	02111335KZ	02111700KZ	8		95-800	S2B155L
C177	BF6M1013CP	237	177	2400	115	843	1500	125	02112860KZ	02111700KZ	8		95-800	S2B155L
C190/1	BF6M1013CP	255	190	2300	127	946	1400	134	02111335KZ	02111700KZ	8		102-800	S2BG139H
C190/2	BF6M1013CP	255	190	2300	125	899	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C190/3	BF6M1013CP	255	190	2300	129	946	1400	134	02111335KZ	02111456KZ	5		102-800	S2BG139H
C181	BF6M1013CP	243	181	2300	120	890	1400	132	02111335KZ	02111700KZ	8		95-800	S2B155L
C171	BF6M1013CP	229	171	2300	113	843	1400	125	02112860KZ	02111700KZ	8		95-800	S2B155L
C161/2	BF6M1013CP	216	161	2300	106	800	1400	118	02111335KZ	02111700KZ	8		95-800	S2B155L
C184	BF6M1013CP	247	184	2200	126	946	1400	134	02111335KZ	02111700KZ	8		102-800	S2BG139H
C194/1	BF6M1013CP	247	184	2200	125	899	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C175	BF6M1013CP	235	175	2200	119	890	1400	132	02111335KZ	02111700KZ	8		95-800	S2B155L
C166/1	BF6M1013CP	222	166	2200	113	843	1400	122	02111335KZ	02111698KZ	8		97-800	S2B147K
C147/2	BF6M1013ECP	200	147	2200	95.0	830	1500		02111335KZ	DLA158P730	9		97-800	S2B147K
C178	BF6M1013CP	239	178	2100	125	946	1400	134	02112860KZ	02111700KZ	8		95-800	S2BG139H
C178/1	BF6M1013CP	239	178	2100	125	899	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C169	BF6M1013CP	226	169	2100	119	890	1400	129	02112860KZ	02111698KZ	8		97-800	S2B147K

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Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: 2DZXL07.1004

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel injection pump	Fuel injector	Injection timing (°)	Speed governor, optionally	Smoke limiter, part of speed governor, -5mm ² /stroke	Turbocharger
		HP	KW	rpm	mm ³ /stroke	Nm	rpm	mm ³ /stroke	part numb.	part numb.	°bdc		mm ² /stroke	part numb.
C161	BF6M1013CP	216	161	2100	113	843	1400	122	02111335KZ	02111698KZ	8		97-800	S2B147K
C169/2	BF6M1013CP	226	169	2000	122	890	1400	129	02111335KZ	02111698KZ	8		97-800	S2B147K
C163	BF6M1013CP	218	163	2000	118	890	1400	129	02111335KZ	02111698KZ	8		97-800	S2B147K
C160/1	BF6M1013CP	214	160	2000	116	890	1400	129	02111335KZ	02111698KZ	8		97-800	S2B147K
C155	BF6M1013CP	208	155	2000	112	843	1400	122	02112860KZ	02111698KZ	8		97-800	S2B147K
C147	BF6M1013CP	197	147	1800	115	843	1400	121	02112860KZ	02111698KZ	8		97-800	S2B148K
C147/G	BF6M1013EC	188	140	2350	92.5	756	1750	115	02111335KZ	02111698KZ	9		97-800	S2B147K
C174	BF6M1013EC	233	174	2300	112	854	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C165/1	BF6M1013EC	221	165	2300	107	811	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C157	BF6M1013EC	210	157	2300	102	769	1400	110	02112860KZ	02111698KZ	9		97-800	S2B147K
C148	BF6M1013EC	205	148	2300	94	727	1400	103	02111335KZ	02111698KZ	9		95-800	S2B147K
C169/1	BF6M1013EC	226	169	2200	112	854	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C162/1	BF6M1013EC	217	162	2200	108	854	1400	122	02111335KZ	02111698KZ	9		102-800	S2B147K
C160	BF6M1013EC	214	160	2200	106	811	1400	116	02112860KZ	02111698KZ	9		99-800	S2B147K
C152	BF6M1013EC	204	152	2200	101	769	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C162	BF6M1013EC	217	162	2100	110	854	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C154	BF6M1013EC	206	154	2100	105	811	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C146	BF6M1013EC	196	146	2100	100	769	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C150	BF6M1013EC	201	150	2000	106	811	1400	116	02112860KZ	02111698KZ	9		99-800	S2B147K
C149	BF6M1013EC	200	149	2000	106	811	1400	116	02112860KZ	02111698KZ	9		99-800	S2B147K
C142	BF6M1013EC	190	142	2000	101	769	1400	110	02112860KZ	02111698KZ	9		97-800	S2B147K

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Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel injection pump	Fuel injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm ² - rpm	Turbocharger
		HP	KW	rpm	mm ³ /stroke	Nm	rpm	mm ³ /stroke	part numb.	part numb.	°bldc		mm ² /stroke	part numb.
C170/1	BF6M1013C	228	170	2300	112	847	1400	122	02111335KZ	02111698KZ	9		102-800	S2B147K
C170/2	BF6M1013C	228	170	2300	114	847	1400	126	02112860KZ	02111454KZ	5		95-800	S2B155L
C161/1	BF6M1013C	216	161	2300	107	804	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C153	BF6M1013C	205	153	2300	102	762	1400	110	02112860KZ	02111698KZ	9		97-800	S2B147K
C144	BF6M1013C	205	144	2300	94	720	1400	110	02111335KZ	02111698KZ	9		95-800	S2B147K
C165/2	BF6M1013C	221	165	2200	112	847	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C156	BF6M1013C	209	156	2200	106	804	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C148	BF6M1013C	198	148	2200	101	728	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C159	BF6M1013C	213	159	2100	110	847	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C151	BF6M1013C	202	151	2100	105	804	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C143	BF6M1013C	192	143	2100	100	762	1400	110	02112860KZ	02111698KZ	9		97-800	S2B147K
C146/1	BF6M1013C	196	146	2000	106	804	1400	116	02111335KZ	02111698KZ	9		99-800	S2B147K
C139	BF6M1013C	186	139	2000	101	762	1400	110	02112860KZ	02111698KZ	9		97-800	S2B147K
C120	BF6M1013C	161	120	1500	101	762	1400	99	02111335KZ	02111698KZ	7		97-800	S2B148K
C118	BF4M1013EC	158	118	2500	108	578	1400	125	02111335KZ	02111698KZ	9		102-800	S2A162E
C115/3	BF4M1013EC	154	115	2500	105	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A162E
C114/2	BF4M1013EC	153	114	2400	105	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A162E
C118/1	BF4M1013EC	158	118	2300	111	578	1400	126	02112860KZ	02111698KZ	9		102-800	S2A153E
C118/2	BF4M1013EC	158	118	2300	114	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C115	BF4M1013EC	154	115	2300	108	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C115/5	BF4M1013EC	154	115	2300	111	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E

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Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel injection pump	Fuel injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm³	Turbocharger
		HP	KW	rpm	mm³/stroke	Nm	rpm	mm³/stroke	part numb.	part numb.	°bdc		mm³/stroke	part numb.
C107	BF4M1013EC	143	107	2300	100	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C107/1	BF4M1013EC	143	107	2300	103	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C114	BF4M1013EC	153	114	2200	112	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C114/1	BF4M1013EC	153	114	2200	115	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C111	BF4M1013EC	149	111	2200	109	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C111/3	BF4M1013EC	149	111	2200	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C104	BF4M1013EC	139	104	2200	102	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C104/5	BF4M1013EC	139	104	2200	105	521	1400	115	02112860KZ	02111698KZ	6		97-800	S2A153E
C110	BF4M1013EC	147	110	2100	111	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C110/1	BF4M1013EC	147	110	2100	113	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C106	BF4M1013EC	142	106	2100	108	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C106/1	BF4M1013EC	142	106	2100	110	549	1400	121	02112860KZ	02111698KZ	6		99-800	S2A153E
C101	BF4M1013EC	135	101	2100	102	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C101/5	BF4M1013EC	135	101	2100	104	521	1400	115	02112860KZ	02111698KZ	6		97-800	S2A153E
C103	BF4M1013EC	138	103	2000	110	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C103/1	BF4M1013EC	138	103	2000	112	549	1400	121	02112860KZ	02111698KZ	6		99-800	S2A153E
C98	BF4M1013EC	131	98	2000	104	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C98/1	BF4M1013EC	131	98	2000	106	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C94	BF4M1013EC	126	94	2000	99	506	1400	110	02112860KZ	02111698KZ	9		97-800	S2A153E
C84	BF4M1013EC	113	84	2000	89	452	1400	98	02112860KZ	02111698KZ	9		97-800	S2A153E
C96/2	BF4M1013EC	129	96	1800	112	548	1400	120	02112860KZ	02126998KZ	7		97-800	S2A157C

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Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: ZDZX107.1004

Engine Model and Part Number Summary Form

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Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque	Fuel Injection pump	Fuel Injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor	Turbocharger
		HP	KW	rpm	mm ³ /stroke	Nm	rpm	mm ³ /stroke	part numb.	part numb.	°bdc		mm ³ /stroke	part numb.
C94/1	BF4M1013EC	126	94	1800	110	548	1400	120	02111335KZ 02112860KZ	02126998KZ	7		97-800	S2A157C
C86	BF4M1013EC	115	86	1800	100	521	1400	114	02112860KZ 02111335KZ	02126998KZ	7		97-800	S2A157C
C80	BF4M1013EC	107	80	1800	95	460	1400	101	02112860KZ 02111335KZ	02126998KZ	7		97-800	S2A157C
C115/1	BF4M1013C	154	115	2500	108	578	1400	125	02112860KZ 02111335KZ	02111698KZ	9		102-800	S2A153E
C115/2	BF4M1013C	154	115	2300	111	578	1400	126	02112860KZ 02111335KZ	02111698KZ	9		102-800	S2A153E
C115/4	BF4M1013C	154	115	2300	114	578	1400	127	02112860KZ 02111335KZ	02111698KZ	6		102-800	S2A153E
C112	BF4M1013C	150	112	2300	108	549	1400	120	02112860KZ 02111335KZ	02111698KZ	9		99-800	S2A153E
C112/1	BF4M1013C	150	112	2300	111	549	1400	121	02112860KZ 02111335KZ	02111698KZ	6		99-800	S2A153E
C104/1	BF4M1013C	139	104	2300	100	521	1400	114	02112860KZ 02111335KZ	02111698KZ	9		97-800	S2A153E
C104/3	BF4M1013C	139	104	2300	103	521	1400	115	02112860KZ 02111335KZ	02111698KZ	6		97-800	S2A153E
C111/1	BF4M1013C	149	111	2200	112	578	1400	126	02112860KZ 02111335KZ	02111698KZ	9		102-800	S2A153E
C111/2	BF4M1013C	149	111	2200	115	578	1400	127	02112860KZ 02111335KZ	02111698KZ	6		102-800	S2A153E
C108	BF4M1013C	145	108	2200	109	549	1400	120	02112860KZ 02111335KZ	02111698KZ	9		99-800	S2A153E
C108/2	BF4M1013C	145	108	2200	112	549	1400	121	02112860KZ 02111335KZ	02111698KZ	6		99-800	S2A153E
C104/1	BF4M1013C	135	101	2200	102	521	1400	114	02112860KZ 02111335KZ	02111698KZ	9		97-800	S2A153E
C104/3	BF4M1013C	135	101	2200	105	521	1400	115	02112860KZ 02111335KZ	02111698KZ	6		97-800	S2A153E
C108/1	BF4M1013C	145	108	2100	111	578	1400	126	02112860KZ 02111335KZ	02111698KZ	9		102-800	S2A153E
C108/3	BF4M1013C	145	108	2100	113	578	1400	127	02112860KZ 02111335KZ	02111698KZ	6		102-800	S2A153E
C104/2	BF4M1013C	139	104	2100	108	549	1400	120	02112860KZ 02111335KZ	02111698KZ	9		99-800	S2A153E
C104/4	BF4M1013C	139	104	2100	110	549	1400	121	02112860KZ 02111335KZ	02111698KZ	6		99-800	S2A153E
C99	BF4M1013C	133	99	2100	102	521	1400	114	02112860KZ 02111335KZ	02111698KZ	9		97-800	S2A153E

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: ZDZX107.1004

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed rpm	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°)	Speed governor, optionally	Smoke limiter, part of speed governor, -5mm³	Turbocharger
		HP	KW		mm³/stroke	Nm	rpm	mm³/stroke	part numb.	part numb.	°bdc		mm³/stroke -rpm	part numb.
C99/1	BF6M1013C	133	99	2100	104	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C101/2	BF6M1013C	135	101	2000	110	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C101/4	BF6M1013C	135	101	2000	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C96	BF6M1013C	129	96	2000	104	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C96/1	BF6M1013C	129	96	2000	106	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
D195	BF6M1013ECP	261	195	2400	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B155L
D190	BF6M1013ECP	255	190	2400	118	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B155L
D173	BF6M1013ECP	232	173	2400	108	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B155L
D182	BF6M1013ECP	244	182	2000	130	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B147K
D165	BF6M1013ECP	221	165	2000	118	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B147K
D174	BF6M1013ECP	233	174	1846	133	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B148K
D158	BF6M1013ECP	212	158	1846	121	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B148K
D190/1	BF6M1013CP	255	190	2400	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B155L
D185	BF6M1013CP	248	185	2400	118	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B155L
D167	BF6M1013CP	224	167	2400	108	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B155L
D179	BF6M1013CP	240	179	2000	130	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B147K
D162	BF6M1013CP	217	162	2000	118	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B147K
D172	BF6M1013CP	230	172	1846	133	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B147K
D156	BF6M1013CP	209	156	1846	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B148K
D160/2	BF6M1013CP	214	160	1800	128	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8		n.a.	S2B148K
D145	BF6M1013CP	194	145	1800	114	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8		n.a.	S2B148K

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Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed rpm	Injection rate at rated power ±5mm ³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Injection rate at peak torque ±4mm ³	Fuel	Fuel injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm ³	Turbocharger
									part numb.	part numb.			part numb.	
D170	BF6M1013EC	228	170	2400	106	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2B155L
D155	BF6M1013EC	208	155	2400	97	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	n.a.	S2B155L
D163/1	BF6M1013EC	218	163	2000	116	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2B147K
D148	BF6M1013EC	198	148	2000	108	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2B147K
D156/1	BF6M1013EC	209	156	1846	119	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8	n.a.	n.a.	S2B148K
D142	BF6M1013EC	190	142	1846	109	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8	n.a.	n.a.	S2B148K
D163	BF6M1013EC	218	163	1800	128	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	7	n.a.	n.a.	S2B148K
D163/2	BF6M1013EC	218	163	1800	128	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	7	n.a.	n.a.	S2B148K
D155/1	BF6M1013EC	208	155	1800	121	n.a.	n.a.	n.a.	02112860KZ	02111542KZ	7	n.a.	n.a.	S2B148K
D148/1	BF6M1013EC	198	148	1800	116	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	7	n.a.	n.a.	S2B148K
D165/1	BF6M1013C	221	165	2400	106	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	n.a.	S2B155L
D150	BF6M1013C	201	150	2400	97	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	n.a.	S2B155L
D160/1	BF6M1013C	214	160	2000	116	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2B147K
D146	BF6M1013C	196	146	2000	106	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2B147K
D154	BF6M1013C	206	154	1846	119	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	8	n.a.	n.a.	S2B148K
D140	BF6M1013C	188	140	1846	109	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	8	n.a.	n.a.	S2B148K
D160	BF6M1013C	214	160	1800	128	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	7	n.a.	n.a.	S2B148K
D152	BF6M1013C	204	152	1800	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	7	n.a.	n.a.	S2B148K
D130	BF6M1013C	174	130	1800	102	n.a.	n.a.	n.a.	02112860KZ	02111542KZ	7	n.a.	n.a.	S2B148K
D113	BF4M1013EC	151	113	2400	107	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	n.a.	S2A162E
D103	BF4M1013EC	138	103	2400	97	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	n.a.	S2A162E

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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°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm³ stroke -rpm	Turbocharger part numb.
									part numb.	part numb.			part numb.	
D108	BF4M1013EC	145	108	2000	117	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A153E	
D98	BF4M1013EC	131	98	2000	106	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A153E	
D104	BF4M1013EC	139	104	1846	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A157C	
D96	BF4M1013EC	127	95	1846	110	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	S2A157C	
D110	BF4M1013EC	147	110	1800	131	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	5	n.a.	S2A157C	
D110/2	BF4M1013EC	147	110	1800	131	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	5	n.a.	S2A157C	
D105	BF4M1013EC	141	105	1800	125	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	5	n.a.	S2A157C	
D100/1	BF4M1013EC	134	100	1800	119	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	5	n.a.	S2A157C	
D110/1	BF4M1013C	147	110	2400	107	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A162E	
D100	BF4M1013C	134	100	2400	97	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	S2A162E	
D106	BF4M1013C	142	106	2000	117	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A153E	
D96	BF4M1013C	129	96	2000	106	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	S2A153E	
D103/1	BF4M1013C	138	103	1846	121	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	9	n.a.	S2A157C	
D93	BF4M1013C	125	93	1846	110	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	9	n.a.	S2A157C	
D97	BF4M1013C	130	97	1800	131	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	5	n.a.	S2A157C	
D92	BF4M1013C	123	92	1800	125	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	5	n.a.	S2A157C	
	VOLVO PENTA													
D110/3	TADS20GE	147	110	1800	131	n.a.	n.a.	n.a.	02111335KZ	02111542KZ	5	n.a.	S2A157C	
D163/3	TAD720GE	218	163	1800	128	n.a.	n.a.	n.a.	02112860KZ	02112383KZ	7	n.a.	S2B148K	
C118/1	TAD520VE	158	118	2300	111	578	1400	126	02112860KZ	02111698KZ	9		102-800 S2A153E	

120916

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: 202XL07.1004

Engine Model and Part Number Summary Form

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Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed rpm	Injection rate at rated power ±5mm³	Peak torque ±5%	Speed at peak torque ±100 rpm	Injection rate at peak torque ±4mm³	Fuel injection pump	Fuel injector	Injection timing (±1°)	Speed governor, optionally	Smoke limiter, part of speed governor, -5mm³ -rpm	Turbocharger
C107	TAD520VE	143	107	2300	100	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C114	TAD520VE	153	114	2200	112	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C104	TAD520VE	139	104	2200	102	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C110	TAD520VE	147	110	2100	111	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C101	TAD520VE	135	101	2100	102	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C174	TAD720VE	233	174	2300	112	854	1400	122	02111335KZ	02111698KZ	9		102-800	S2B147K
C165/1	TAD720VE	221	165	2300	107	811	1400	116	02112860KZ	02111698KZ	9		99-800	S2B147K
C157	TAD720VE	210	157	2300	102	769	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C169/1	TAD720VE	226	169	2200	112	854	1400	122	02112860KZ	02111698KZ	9		102-800	S2B147K
C152	TAD720VE	204	152	2200	101	769	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C162	TAD720VE	217	162	2100	110	854	1400	122	02111335KZ	02111698KZ	9		102-800	S2B147K
C154	TAD720VE	206	154	2100	105	811	1400	116	02112860KZ	02111698KZ	9		99-800	S2B147K
C146	TAD720VE	196	146	2100	100	769	1400	110	02111335KZ	02111698KZ	9		97-800	S2B147K
C134	TAD720VE	180	134	2000	106	727	1400	103	02112860KZ	02111698KZ	9		99-800	S2B147K
C195/2	TAD721VE	261	195	2300	125	907	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C176	TAD721VE	236	176	2300	113	850	1400	125	02111335KZ	02111700KZ	8		95-800	S2B155L
C188/1	TAD721VE	252	188	2200	125	907	1400	133	02112860KZ	02111700KZ	8		95-800	S2B155L
C170	TAD721VE	228	170	2200	113	850	1400	125	02112860KZ	02111700KZ	8		95-800	S2B155L
C182/1	TAD721VE	244	182	2100	125	907	1400	133	02111335KZ	02111700KZ	8		95-800	S2B155L
C165	TAD721VE	221	165	2100	113	850	1400	122	02112860KZ	02111698KZ	8		97-800	S2B147K
COM														

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°)	Speed governor, optionally	Smoke limiter, part of speed governor, 5mm³ stroke	Turbocharger
C120	BF6M1013C	161	120	1500	101	762	1400	99	02111335KZ	02111698KZ	7		97-800	S2B148K
C118	BF4M1013EC	158	118	2500	108	578	1400	125	02112860KZ	02111698KZ	9		102-800	S2A162E
C115/3	BF4M1013EC	154	115	2500	105	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A162E
C114/2	BF4M1013EC	153	114	2400	105	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A162E
C118/1	BF4M1013EC	158	118	2300	111	578	1400	126	02112860KZ	02111698KZ	9		102-800	S2A153E
C118/2	BF4M1013EC	158	118	2300	114	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C115	BF4M1013EC	154	115	2300	108	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C115/5	BF4M1013EC	154	115	2300	111	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C107	BF4M1013EC	143	107	2300	100	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C107/1	BF4M1013EC	143	107	2300	103	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C114	BF4M1013EC	153	114	2200	112	578	1400	126	02112860KZ	02111698KZ	9		102-800	S2A153E
C114/1	BF4M1013EC	153	114	2200	115	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C111	BF4M1013EC	149	111	2200	109	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C111/3	BF4M1013EC	149	111	2200	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C104	BF4M1013EC	139	104	2200	102	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C104/5	BF4M1013EC	139	104	2200	105	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C110	BF4M1013EC	147	110	2100	111	578	1400	126	02112860KZ	02111698KZ	9		102-800	S2A153E
C110/1	BF4M1013EC	147	110	2100	113	578	1400	127	02111335KZ	02111698KZ	6		102-800	S2A153E
C106	BF4M1013EC	142	106	2100	108	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C106/1	BF4M1013EC	142	106	2100	110	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C101	BF4M1013EC	135	101	2100	102	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E

140816
 EPA U-K-015-0051

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: ZDZX107.1004

Engine Model and Part Number Summary Form

Engine code	Engine Model	BHP	BRW	Rated Power Engine Speed rpm	Injection rate at rated power $\pm 6mm^3$	Peak torque $\pm 5\%$	Speed at peak torque ± 100 rpm	Injection rate at peak torque $\pm 4mm^3$	Fuel injection		Injection timing ($\pm 1^\circ$)	Speed governor, optionally	Smoke limiter, part of speed governor - $5mm^3$ stroke	Turbocharger
									part numb.	Fuel injector: part numb.				
C101/5	BF4M1013EC	135	101	2100	104	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C103	BF4M1013EC	138	103	2000	110	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C103/1	BF4M1013EC	138	103	2000	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C98	BF4M1013EC	131	98	2000	104	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C98/1	BF4M1013EC	131	98	2000	106	521	1400	115	02112860KZ	02111698KZ	6		97-800	S2A153E
C94	BF4M1013EC	126	94	2000	99	506	1400	110	02111335KZ	02111698KZ	9		97-800	S2A153E
C84	BF4M1013EC	113	84	2000	89	452	1400	98	02112860KZ	02111698KZ	9		97-800	S2A153E
C96/2	BF4M1013EC	129	96	1800	112	548	1400	120	02111335KZ	02126998KZ	7		97-800	S2A157C
C94/1	BF4M1013EC	126	94	1800	110	548	1400	120	02112860KZ	02126998KZ	7		97-800	S2A157C
C86	BF4M1013EC	115	86	1800	100	521	1400	114	02111335KZ	02126998KZ	7		97-800	S2A157C
C80	BF4M1013EC	107	80	1800	95	460	1400	101	02111335KZ	02126998KZ	7		97-800	S2A157C
C115/1	BF4M1013C	154	115	2500	108	578	1400	125	02112860KZ	02111698KZ	9		102-800	S2A162E
C115/2	BF4M1013C	154	115	2300	111	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C115/4	BF4M1013C	154	115	2300	114	578	1400	127	02112860KZ	02111698KZ	6		102-800	S2A153E
C112	BF4M1013C	150	112	2300	108	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C112/1	BF4M1013C	150	112	2300	111	549	1400	121	02112860KZ	02111698KZ	6		99-800	S2A153E
C104/1	BF4M1013C	139	104	2300	100	521	1400	114	02111335KZ	02111698KZ	9		97-800	S2A153E
C104/3	BF4M1013C	139	104	2300	103	521	1400	115	02112860KZ	02111698KZ	6		97-800	S2A153E
C111/1	BF4M1013C	149	111	2200	112	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C111/2	BF4M1013C	149	111	2200	115	578	1400	127	02112860KZ	02111698KZ	6		102-800	S2A153E
C108	BF4M1013C	145	108	2200	109	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E

EPH 4-K-013-0057
 150916

Manufacturer: DEUTZ AG
 Engine category: Nonroad CI
 EPA Engine Family: ZDZX107.1004

Engine Model and Part Number Summary Form

Eo# U-R-013-005 /
 16 08 / 6

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°)	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm³	Turbocharger
		HP	KW	rpm	mm³/stroke	Nm	rpm	mm³/stroke	part numb.	part numb.	°bdc		mm³/stroke	part numb.
C108/2	BF4M1013C	145	108	2200	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C101/1	BF4M1013C	135	101	2200	102	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C101/3	BF4M1013C	135	101	2200	105	521	1400	115	02112860KZ	02111698KZ	6		97-800	S2A153E
C108/1	BF4M1013C	145	108	2100	111	578	1400	126	02111335KZ	02111698KZ	9		102-800	S2A153E
C108/3	BF4M1013C	145	108	2100	113	578	1400	127	02112860KZ	02111698KZ	6		102-800	S2A153E
C104/2	BF4M1013C	139	104	2100	108	549	1400	120	02111335KZ	02111698KZ	9		99-800	S2A153E
C104/4	BF4M1013C	139	104	2100	110	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C99	BF4M1013C	133	99	2100	102	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C99/1	BF4M1013C	133	99	2100	104	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E
C101/2	BF4M1013C	135	101	2000	110	549	1400	120	02112860KZ	02111698KZ	9		99-800	S2A153E
C101/4	BF4M1013C	135	101	2000	112	549	1400	121	02111335KZ	02111698KZ	6		99-800	S2A153E
C96	BF4M1013C	129	96	2000	104	521	1400	114	02112860KZ	02111698KZ	9		97-800	S2A153E
C96/1	BF4M1013C	129	96	2000	106	521	1400	115	02111335KZ	02111698KZ	6		97-800	S2A153E