

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0170 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL05.7033	5.7, 3.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Electronic Control Module, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Compressor, Other 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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	--	--	5.7	0.7	0.22	7	2	21

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Manufacturer:	Deutz AG
Engine category:	Nonroad CI
EPA Engine Family:	6DZXL05.7033
Mfr Family Name:	VOLVO D6D, BF6M1012EC/MVS
Process Code:	New Submission

Attachment
U-R-013-0170

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
CE119	D6DEAE2	159.5@1900	91	57.6	665@1400	100	48.3	DDI, ECM, <i>SP2-7C, etc</i>
CE90/1	D6DEBE2	120.6@1900	72	45.5	542@1400	84	40.5	DDI, ECM,
CE110	D6DECE2	147.5@2000	83	55.3	595@1450	90	44.9	DDI, ECM,
CE125	D6DEDE2	167.6@2100	88	61.5	625@1400	95	47.4	DDI, ECM,
✓ CE119/1	D6DLAE2	159.5@2200	84	61.5	739@1220	109	47.5	DDI, ECM,
CE100	D6DLBE2	134.1@2200	72	52.7	739@1220	109	47.5	DDI, ECM,
CE90	D6DLCE2	120.6@2200	64	46.9	570@1650	87	49.2	DDI, ECM,

 AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0169 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL06.1028	4.038, 6.057	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Loader, Compressor, Other 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 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	-	-	6.0	0.6	0.06	3	1	6

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque Per SAE J193C	9.Emission Control Device Per SAE J193C
6DZXL06.1028	CE100	BF4M2012C	134.1@2400	94	50.1	493@1400	106	35.3	DDI, TC, CAC, SFI
6DZXL06.1028	CE103	BF4M2012C	138.1@2500	95	52.7	493@1400	106	35.3	DDI, TC, CAC,
6DZXL06.1028	CE75	BF4M2012C	100.5@2000	80	35.5	422@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE78	BF4M2012C	104.5@2100	80	37.3	422@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE80	BF4M2012C	107.2@2000	85	37.7	445@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE81	BF4M2012C	108.6@2200	80	39.1	422@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE83	BF4M2012C	111.3@2300	80	40.8	422@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE83/1	BF4M2012C	111.3@2100	85	39.6	445@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE84	BF4M2012C	112.6@2000	90	39.9	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE85	BF4M2012C	113.9@2400	79	42.1	469@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE85/1	BF4M2012C	113.9@2200	85	41.5	469@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE87	BF4M2012C	116.6@2100	89	41.5	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE88	BF4M2012C	118@2500	80	44.4	422@1400	91	30.3	DDI, TC, CAC,
6DZXL06.1028	CE88/1	BF4M2012C	118@2300	84	42.9	445@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE89	BF4M2012C	119.3@2000	95	42.2	493@1400	106	35.3	DDI, TC, CAC,
6DZXL06.1028	CE90	BF4M2012C	120.6@2400	84	44.7	469@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE90/1	BF4M2012C	120.6@2200	89	43.5	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE92	BF4M2012C	123.3@2100	94	43.8	493@1400	106	35.3	DDI, TC, CAC,
6DZXL06.1028	CE93	BF4M2012C	124.7@2500	85	47.2	445@1400	96	31.9	DDI, TC, CAC,
6DZXL06.1028	CE93/1	BF4M2012C	124.7@2300	89	45.4	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE95	BF4M2012C	127.3@2400	89	47.4	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE95/1	BF4M2012C	127.3@2200	94	45.9	493@1400	106	35.3	DDI, TC, CAC,
6DZXL06.1028	CE98	BF4M2012C	131.4@2500	90	49.9	469@1400	101	33.6	DDI, TC, CAC,
6DZXL06.1028	CE98/1	BF4M2012C	131.4@2300	94	48	493@1400	106	35.3	DDI, TC, CAC,
6DZXL06.1028	CE114	BF6M2012C	152.8@2000	82	54.6	633@1400	89	44.4	DDI, TC, CAC,
6DZXL06.1028	CE118	BF6M2012C	158.2@2100	79	55.2	633@1400	89	44.4	DDI, TC, CAC,
6DZXL06.1028	CE120	BF6M2012C	160.9@2000	84	55.9	671@1400	95	47.4	DDI, TC, CAC,
6DZXL06.1028	CE121	BF6M2012C	162.2@2200	79	57.9	633@1400	89	44.4	DDI, TC, CAC,

Attachment 1 of 4
4-2-013-0169

Engine Model Summary Template

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Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate:		8.Fuel Rate: (lbs/hr)@peak torque Device Per SAE J193C	9.Emission Control
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	mm/stroke@peak torque					
6DZXL06.1028	CE124	BF6M2012C	166.2@2100	83	58	671@1400	95	47.4	DDI, TC, CAC, SP		
6DZXL06.1028	CE125	BF6M2012C	167.6@2300	79	60.5	633@1400	89	44.4	DDI, TC, CAC,		
6DZXL06.1028	CE127	BF6M2012C	170.3@2000	89	59.3	705@1400	100	49.9	DDI, TC, CAC,		
6DZXL06.1028	CE128	BF6M2012C	171.6@2400	79	63.1	633@1400	89	44.4	DDI, TC, CAC,		
6DZXL06.1028	CE128/1	BF6M2012C	171.6@2200	83	60.8	671@1400	95	47.4	DDI, TC, CAC,		
6DZXL06.1028	CE103	TAD420VE	138.1@2500	95	52.7	493@1400	106	35.3	DDI, TC, CAC,		
6DZXL06.1028	CE83/1	TAD420VE	111.3@2100	85	39.6	445@1400	96	31.9	DDI, TC, CAC,		
6DZXL06.1028	CE88/1	TAD420VE	118@2300	84	42.9	445@1400	96	31.9	DDI, TC, CAC,		
6DZXL06.1028	CE92	TAD420VE	123.3@2100	94	43.8	493@1400	106	35.3	DDI, TC, CAC,		
6DZXL06.1028	CE93	TAD420VE	124.7@2500	85	47.2	445@1400	96	31.9	DDI, TC, CAC,		
6DZXL06.1028	CE98/1	TAD420VE	131.4@2300	94	48	493@1400	106	35.3	DDI, TC, CAC,		
6DZXL06.1028	CE121	TAD620VE	162.2@2100	81	56.6	631@1400	92	45.9	DDI, TC, CAC,		
6DZXL06.1028	CE85	TAD620VE	113.9@2300	55	42.1	500@1400	73	36.4	DDI, TC, CAC,		
6DZXL06.1028	CE103	BF6M2012C	138.1@2300	66	50.5	550@1400	78	38.9	DDI, TC, CAC,		
6DZXL06.1028	CE79T	BF6M2012C	117@2300	61	46.7	437@1200	65	30.3	DDI, TC, CAC,		
6DZXL06.1028	CE87T	BF6M2012C	128.8@2300	65	49.8	490@1200	74	36.9	DDI, TC, CAC,		
6DZXL06.1028	CE94T	BF6M2012C	139@2300	72	55.1	530@1000	80	34.6	DDI, TC, CAC,		
6DZXL06.1028	CE102T	BF6M2012C	153.5@2300	77	59	570@1200	86	40.1	DDI, TC, CAC,		
6DZXL06.1028	CE74T	BF4M2012C	109.6@2300	65	33.2	413@1300	93	32	DDI, TC, CAC,		
6DZXL06.1028	CE61T	BF4M2012C	87.1@2300	61	31.1	425@1500	69	22.9	DDI, TC, CAC,		
6DZXL06.1028	CE69T	BF4M2012C	99.2@2300	75	38.3	431@1500	100	33.3	DDI, TC, CAC,		
6DZXL06.1028	CE78T	BF4M2012C	111.3@2300	80	40.8	479@1500	106	35.3	DDI, TC, CAC,		
6DZXL06.1028	CE103/1	BF6M2012C	138.1@2100	73	51	550@1400	78	38.9	DDI, TC, CAC,		
6DZXL06.1028	CE110	BF6M2012C	147.5@2300	76	58.2	570@1400	84	41.9	DDI, TC, CAC,		
6DZXL06.1028	CE100	BF6M2012C	134.1@2300	65	49.8	530@1400	78	38.9	DDI, TC, CAC,		
6DZXL06.1028	CE90	BF6M2012C	120.6@2300	61	46.7	460@1400	77	38.4	DDI, TC, CAC,		
6DZXL06.1028	CE80	BF6M2012C	107.2@2300	55	42.1	430@1400	67	33.4	DDI, TC, CAC,		
6DZXL06.1028	CE110/1	BF6M2012C	147.5@2200	77	56.4	570@1400	84	41.9	DDI, TC, CAC,		

Engine Model Summary Template

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Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)		4.Fuel Rate: mm³/stroke @ peak HP (for diesel only)		5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		6.Torque @ RPM (SEA Gross)		7.Fuel Rate: mm³/stroke@peak torque		8.Fuel Rate: (lbs/hr)@peak torque		9.Emission Control Device Per SAE J193c	
			3.BHP@RPM (SAE Gross)		4.Fuel Rate: mm³/stroke @ peak HP (for diesel only)		5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		6.Torque @ RPM (SEA Gross)		7.Fuel Rate: mm³/stroke@peak torque		8.Fuel Rate: (lbs/hr)@peak torque		9.Emission Control Device Per SAE J193c	
6DZXL06.1028	CE100/1	BF6M2012C	134.1@2200		69		50.5		530@1400		78		38.9		DDI, TC, CAC, SPl	
6DZXL06.1028	CE90/1	BF6M2012C	120.6@2200		63		46.1		460@1400		77		38.4		DDI, TC, CAC,	
6DZXL06.1028	CE80/1	BF6M2012C	107.2@2200		56		41		430@1400		67		33.4		DDI, TC, CAC,	
6DZXL06.1028	CE110/2	BF6M2012C	147.5@2100		78		54.5		570@1400		84		41.9		DDI, TC, CAC,	
6DZXL06.1028	CE100/2	BF6M2012C	134.1@2100		72		50.3		530@1400		77		38.4		DDI, TC, CAC,	
6DZXL06.1028	CE90/2	BF6M2012C	120.6@2100		65		45.4		460@1400		67		33.4		DDI, TC, CAC,	
6DZXL06.1028	CE80/2	BF6M2012C	107.2@2100		57		39.8		430@1400		63		31.4		DDI, TC, CAC,	
6DZXL06.1028	CE110/3	BF6M2012C	147.5@2000		81		53.9		570@1400		84		41.9		DDI, TC, CAC,	
6DZXL06.1028	CE100/3	BF6M2012C	134.1@2000		75		49.9		530@1400		77		38.4		DDI, TC, CAC,	
6DZXL06.1028	CE90/3	BF6M2012C	120.6@2000		67		44.6		460@1400		67		33.4		DDI, TC, CAC,	
6DZXL06.1028	CE80/3	BF6M2012C	107.2@2000		59		39.3		430@1400		63		31.4		DDI, TC, CAC,	
6DZXL06.1028	CE100/4	BF6M2012C	134.1@1900		78		49.3		570@1400		84		41.9		DDI, TC, CAC,	
6DZXL06.1028	CE90/4	BF6M2012C	120.6@1900		70		44.3		530@1400		77		38.4		DDI, TC, CAC,	
6DZXL06.1028	CE80/4	BF6M2012C	107.2@1900		60		37.9		460@1400		67		33.4		DDI, TC, CAC,	
6DZXL06.1028	CE90/5	BF6M2012C	120.6@1800		73		43.7		530@1400		77		38.4		DDI, TC, CAC,	
6DZXL06.1028	CE80/5	BF6M2012C	107.2@1800		65		38.9		460@1400		67		33.4		DDI, TC, CAC,	
6DZXL06.1028	CE95	D4DRBE2	127.3@2200		94		45.9		493@1400		106		35.3		DDI, TC, CAC,	
6DZXL06.1028	CE121	D6DRAE2	162.2@2200		81.5		59.7		631@1400		94		46.9		DDI, TC, CAC,	
6DZXL06.1028	CE82	D4DDCE2	109.9@2100		85		39.6		445@1400		96		31.9		DDI, TC, CAC,	
6DZXL06.1028	CE90	D4DDDE2	120.6@2200		89		43.5		469@1400		101		33.6		DDI, TC, CAC,	
6DZXL06.1028	CE66T	BF4M2012C	97.8@2300		74		37.8		384@1200		89		27.6		DDI, TC, CAC,	
6DZXL06.1028	CE93/2	BF4M2012C	124.7@2300		89		45.4		469@1400		101		33.6		DDI, TC, CAC,	
6DZXL06.1028	CE76T	BF6M2012C	111.9@2300		58		44.4		448@1400		68		35.1		DDI, TC, CAC,	
6DZXL06.1028	DE88	BF4M2012C	118@1800		103		41.1		n.a.@n.a.		0		0		DDI, TC, CAC,	
6DZXL06.1028	DE83	BF4M2012C	111.3@1800		97		38.7		n.a.@n.a.		0		0		DDI, TC, CAC,	
6DZXL06.1028	DE88/1	BF4M2012C	118@1846		101		41.4		n.a.@n.a.		0		0		DDI, TC, CAC,	
6DZXL06.1028	DE90	BF4M2012C	120.6@2000		96		42.6		n.a.@n.a.		0		0		DDI, TC, CAC,	
6DZXL06.1028	DE102	BF4M2012C	136.7@2400		96		51.1		n.a.@n.a.		0		0		DDI, TC, CAC,	

Engine Model Summary Template

4 867
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Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: mm/stroke @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J193C
5DZXL06.1028	CE110T	BF6M2012C	163.3@2350	80	62.6	610@1300	91	45.4	DDI, TC, CAC, SPC
5DZXL06.1028	CE129,5	BF6M2012C	173.6@2500	77	64.1	633@1400	89	44.4	DDI, TC, CAC,
5DZXL06.1028	CE129,3	BF6M2012C	173.6@2300	82	62.8	671@1400	95	47.4	DDI, TC, CAC,
5DZXL06.1028	CE110T1	BF6M2012C	158.6@2300	79	60.5	610@1300	91	45.4	DDI, TC, CAC,
5DZXL06.1028	CE121/1	D6DRAE2	162.2@2200	81.5	59.7	631@1400	94	46.9	DDI, TC, CAC,
5DZXL06.1028	CE93T	BF4M2012C	124.7@2300	102	52.1	476.7@1400	0	0	DDI, TC, CAC,
5DZXL06.1028	CE129,9	BF6M2012C	174.1@2100	0	0	705@1400	100	49.9	DDI, TC, CAC,

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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;

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MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2006	6DZXL05.7019	3.8, 5.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Tractor	

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 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	-	-	5.9	0.8	0.15	7	1	18

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 30TH day of December 2005.


Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Attachment
U-R-013-067

Manufacturer: **DEUTZ AG**
 Engine category: **Nonroad CI**
 EPA Engine Family: **6DZXL05.7019**
 Mfr Family Name: **BF4M2013C, BF6M2013C**
 Process Code: **New Submission**

1 Engine Code	2 Engine Model	3 BHP@RPM (SAE Gross)	4 Fuel Rate: mm/stroke @ peak HP (for diesel only)	5 Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6 Torque @ RPM (SEA Gross)	7 Fuel Rate: mm/stroke@peak torque	8 Fuel Rate: (lbs/hr)@peak torque	9 Emission Control Device Per SAE J1930
CE63T	BF4M2013C	95.8@2100	79	36.8	423@1400	95	30.6	DDI, TC, CAC,
CE74T	BF4M2013C	109.9@2100	88	41	488@1400	107	34.4	DDI, TC, CAC,
CE81T	BF4M2013C	119.3@2100	95	44.3	527@1400	115	37	DDI, TC, CAC,
CE88T	BF4M2013C	127.3@2100	102	47.5	563@1400	125	38.8	DDI, TC, CAC,
CE103T	BF6M2013C	151.5@2100	81	56.6	663@1450	101	48.8	DDI, TC, CAC,
CE118T	BF6M2013C	172.3@2100	92	64.3	758@1450	115	55.5	DDI, TC, CAC,
CE119T	BF6M2013C	166.2@2100	86	60.1	730@1450	108	52.1	DDI, TC, CAC,
CE85T	BF6M2013C	124.7@2100	67	46.8	546@1450	83	40.1	DDI, TC, CAC,
CE92T	BF6M2013C	135.4@2100	73	51	595@1450	90	43.4	DDI, TC, CAC,
CE124T	BF6M2013C	172.9@2100	92	64	790@1450	115	55.5	DDI, TC, CAC,
CE138T	BF6M2013C	185@2100	100	68	853@1450	126	61	DDI, TC, CAC,

*Test engine only, not produced in engine family

 AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0168 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL06.1038	6.057, 4.038	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter			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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT	-	-	6.4	0.8	0.10	2	2	3

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate:		8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1939
				mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	(lbs/hr) @ peak HP (for diesels only)	mm/stroke@peak torque					
3DZXL06.1038	CE60	BF4M2012	80.4@2000	68	30.2	333@1400	76	25.3	DDI, TC, SP2			
3DZXL06.1038	CE62	BF4M2012	83.1@2100	68	31.7	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE63	BF4M2012	84.4@2000	71.5	31.7	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE64	BF4M2012	85.8@2200	68	33.2	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE66	BF4M2012	88.5@2300	68	34.7	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE66/1	BF4M2012	88.5@2100	72	33.5	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE67	BF4M2012	89.8@2000	76	33.7	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE68	BF4M2012	91.1@2400	69	36.7	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE68/1	BF4M2012	91.1@2200	72.5	35.4	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE69	BF4M2012	92.5@2100	75.5	35.2	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE70	BF4M2012	93.8@2500	69.5	38.6	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE70/1	BF4M2012	93.8@2300	72.5	37	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE70/2	BF4M2012	93.8@2000	79.8	35.4	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE72	BF4M2012	96.5@2400	73	38.9	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE72/1	BF4M2012	96.5@2200	76.5	37.3	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE73	BF4M2012	97.8@2100	79.8	37.2	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE74	BF4M2012	99.2@2500	73.5	40.8	352@1400	80	26.6	DDI, TC,			
3DZXL06.1038	CE74.9	BF4M2012	100.4@2500	74.5	41.3	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE74.9/1	BF4M2012	100.4@2500	74.5	41.3	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE74.9/2	BF4M2012	100.4@2400	76	40.5	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE74.9/3	BF4M2012	100.4@2400	76	40.5	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE74.9/4	BF4M2012	100.4@2300	78	39.8	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE74.9/5	BF4M2012	100.4@2200	80	39.1	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE74/1	BF4M2012	99.2@2300	77	39.3	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE65	BF4M2012	87.1@2500	64.5	35.8	333@1400	76	25.3	DDI, TC,			
3DZXL06.1038	CE66/2	BF4M2012	88.5@1800	79.5	31.7	390@1400	90	29.9	DDI, TC,			
3DZXL06.1038	CE64/1	BF4M2012	85.8@1800	77	30.7	371@1400	85	28.3	DDI, TC,			
3DZXL06.1038	CE62/1	BF4M2012	83.1@1800	75	29.9	352@1400	80	26.6	DDI, TC,			

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J193C
				mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	(lbs/hr) @ peak HP (for diesels only)	(lbs/hr)@peak torque				
SDZXL06.1038	CE60/1	BF4M2012	80.4@1800	72.5	28.9	333@1400	76	25.3	DDI, TC, SPL		
SDZXL06.1038	CE68/2	BF4M2012	91.1@1900	79.5	33.5	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE66/3	BF4M2012	88.5@1900	77	32.5	371@1400	85	28.3	DDI, TC,		
SDZXL06.1038	CE63/1	BF4M2012	84.4@1900	73.5	31	352@1400	80	26.6	DDI, TC,		
SDZXL06.1038	CE60/2	BF4M2012	80.4@1900	70	29.5	333@1400	76	25.3	DDI, TC,		
SDZXL06.1038	CE60/3	BF4M2012	80.4@2100	66.5	31	300@1400	69	22.9	DDI, TC,		
SDZXL06.1038	CE60/4	BF4M2012	80.4@2200	65	31.7	300@1400	69	22.9	DDI, TC,		
SDZXL06.1038	CE60/5	BF4M2012	80.4@2300	63	32.1	300@1400	69	22.9	DDI, TC,		
SDZXL06.1038	CE74,9/1	BF6M2012	100.4@2300	51.5	39.4	400@1200	60	25.9	DDI, TC,		
SDZXL06.1038	CE74,9/2	BF6M2012	100.4@2200	53.5	39.2	400@1200	60	25.9	DDI, TC,		
SDZXL06.1038	CE74,9/3	BF6M2012	100.4@2200	53.5	39.2	430@1200	64.5	27.9	DDI, TC,		
SDZXL06.1038	CE74,9/4	BF6M2012	100.4@2100	56.5	39.5	430@1200	64.5	27.9	DDI, TC,		
SDZXL06.1038	CE74,9/5	BF6M2012	100.4@2000	59	39.3	470@1200	70.5	30.5	DDI, TC,		
SDZXL06.1038	CE74,9/6	BF6M2012	100.4@1900	62	39.2	470@1200	70.5	30.5	DDI, TC,		
SDZXL06.1038	CE74,9/7	BF6M2012	100.4@1800	65.5	39.2	500@1200	70.5	30.5	DDI, TC,		
SDZXL06.1038	CE74,5	D4DRAE2	99.9@2200	80	39.1	390@1400	75	24.9	DDI, TC,		
SDZXL06.1038	CE73	D4DEAE2	97.8@2100	79.8	37.2	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE74,9	D4DLAE2	100.4@2200	80	39.1	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE64	D4DCAE2	85.8@2200	68	33.2	390@1400	82	27.3	DDI, TC,		
SDZXL06.1038	CE70	D4DCBE2	93.8@2200	80	39.1	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE74,5	D4DCCE2	99.9@2200	80	39.1	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE74,9/2	D4DCDE2	100.4@2500	74.5	41.3	390@1400	90	29.9	DDI, TC,		
SDZXL06.1038	CE62	D4DDAE2	83.1@2100	68	31.7	333@1400	76	25.3	DDI, TC,		
SDZXL06.1038	CE69	D4DDBE2	92.5@2100	75.5	35.2	371@1400	85	28.3	DDI, TC,		
SDZXL06.1038	CE59T	BF4M2012	86.8@2300	67.5	34.4	340@1300	78	25.9	DDI, TC,		
SDZXL06.1038	CE61T	BF4M2012	87.8@2300	70	35.7	345@1300	81	26.9	DDI, TC,		
SDZXL06.1038	CE56T	BF4M2012	81.1@2300	65	33.2	300@1300	71	23.6	DDI, TC,		
SDZXL06.1038	CE66	TD420VE	88.5@2100	72	33.5	352@1400	80	26.6	DDI, TC,		

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)		4.Fuel Rate: mm/stroke @ peak HP (for diesel only)		5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		6.Torque @ RPM (SEA Gross)		7.Fuel Rate: mm/stroke@peak torque		8.Fuel Rate: (lbs/hr)@peak torque Device Per SAE J193c		9.Emission Control
DZXL06.1038	CE73	TD420VE	97.8@2100		79.8		37.2		390@1400		90		29.9		DDI, TC, SPL
DZXL06.1038	CE70	TD420VE	93.8@2300		72.5		37		352@1400		80		26.6		DDI, TC,
DZXL06.1038	CE74.9	TD420VE	100.4@2300		78		39.8		390@1400		90		29.9		DDI, TC,
DZXL06.1038	CE74	TD420VE	99.2@2500		73.5		40.8		352@1400		80		26.6		DDI, TC,
DZXL06.1038	CE74.9/1	TD420VE	100.4@2500		74.5		41.3		390@1400		90		29.9		DDI, TC,
DZXL06.1038	DE66	BF4M2012	88.5@1800		82.5		32.9		n.a.@n.a.		0		0		DDI, TC,
DZXL06.1038	DE70	BF4M2012	93.8@1800		88		35.1		n.a.@n.a.		0		0		DDI, TC,
DZXL06.1038	DE70/1	BF4M2012	93.8@1846		87		35.6		n.a.@n.a.		0		0		DDI, TC,
DZXL06.1038	DE74.9	BF4M2012	100.4@2000		87		38.6		n.a.@n.a.		0		0		DDI, TC,
DZXL06.1038	DE74.9/1	BF4M2012	100.4@2400		76		40.5		n.a.@n.a.		0		0		DDI, TC,
DZXL06.1038	CE71T	BF4M2012	94.5@2300		73		37.3		360@1300		81		26.9		DDI, TC,

 AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0166 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL07.1005	4.76	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger			Generator Set, Other 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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50
		CERT	-	-	7.1	3.1	.30	6	4	10

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 30TH day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer:	DEUTZ AG
Engine category:	Nonroad CI
EPA Engine Family:	6DZXL07.1005
Mfr Family Name:	BF4M 1013E, D5D
Process Code:	New Submission

U-2-013-0166

[illegible]

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0165 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL07.1034	7.2	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter (some models), Charge Air Cooler			Loader, Compressor	

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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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):

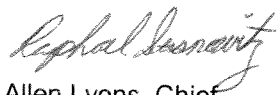
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
		CERT	-	-	5.9	1.1	0.12	4	1	9

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: mm/stroke @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J193C
6DZXL07.1034	DE117	BF4M1013FC	156.8@2000	132	58.6	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	DE106/1	BF4M1013FC	142.1@2000	119	52.8	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	DE122	BF4M1013FC	163.6@1846	149	61.1	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	DE111	BF4M1013FC	148.8@1846	135	55.3	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	CE86	BF4M1013EC	115.3@1800	107	42.7	525@1400	123	38.2	DDI, TC, CAC,
6DZXL07.1034	CE80	BF4M1013EC	107.2@1800	100	39.9	500@1400	118	36.7	DDI, TC, CAC,
6DZXL07.1034	DE110/1	TAD520GE	147.5@1800	138	55.1	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	CE118	TAD520VE	158.2@2300	121	61.8	577@1400	129	40.1	DDI, TC, CAC,
6DZXL07.1034	CE107	TAD520VE	143.4@2300	112	57.2	520@1400	118	36.7	DDI, TC, CAC,
6DZXL07.1034	CE114	TAD520VE	152.8@2200	119	58.1	569@1400	129	40.1	DDI, TC, CAC,
6DZXL07.1034	CE110	TAD520VE	147.5@2100	120	55.9	577@1400	131	40.7	DDI, TC, CAC,
6DZXL07.1034	CE101/1	TAD520VE	135.4@2100	111	51.7	520@1400	117	36.3	DDI, TC, CAC,
6DZXL07.1034	CE104	TAD520VE	139.4@2200	108	52.7	512@1400	118	36.7	DDI, TC, CAC,
6DZXL07.1034	CE235	BF6M1013FC	315@2300	211.5	126.8	1380@1700	216	107.9	Test Engine
6DZXL07.1034	CE112/1	BF4M1013C	152.7@2300	117	59.7	544@1400	122	37.9	DDI, TC, CAC,
6DZXL07.1034	CE104	BF4M1013C	142@2300	110	56.2	516@1400	117	36.3	DDI, TC, CAC,
6DZXL07.1034	CE99/1	BF4M1013C	135.3@2300	105	53.6	487@1400	113	35.1	DDI, TC, CAC,
6DZXL07.1034	CE108	BF4M1013C	147@2200	116	56.7	544@1400	122	37.9	DDI, TC, CAC,
6DZXL07.1034	CE101/1	BF4M1013C	137.6@2200	109	53.2	516@1400	117	36.3	DDI, TC, CAC,
6DZXL07.1034	CE96/2	BF4M1013C	130.9@2200	103	50.3	487@1400	113	35.1	DDI, TC, CAC,
6DZXL07.1034	CE104/1	BF4M1013C	141.4@2100	115	53.6	544@1400	123	38.2	DDI, TC, CAC,
6DZXL07.1034	CE99/3	BF4M1013C	134.6@2100	110	51.3	516@1400	117	36.3	DDI, TC, CAC,
6DZXL07.1034	CE94	BF4M1013C	127.9@2100	105	48.9	487@1400	110	34.2	DDI, TC, CAC,
6DZXL07.1034	CE101/2	BF4M1013C	137.1@2000	116	51.5	544@1400	123	38.2	DDI, TC, CAC,
6DZXL07.1034	CE96/1	BF4M1013C	130.4@2000	111	49.3	516@1400	117	36.3	DDI, TC, CAC,
6DZXL07.1034	CE90	BF4M1013C	122.3@2000	105	46.6	487@1400	110	34.2	DDI, TC, CAC,
6DZXL07.1034	CE95	BF4M1013EC	127.3@2300	99	50.5	491@1400	112	34.8	DDI, TC, CAC,
6DZXL07.1034	CE86/1	BF4M1013EC	115.3@2300	91	46.5	491@1400	112	34.8	DDI, TC, CAC,

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate:		8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J193C
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	mm/stroke@peak torque					
3DZXL07.1034	CE112	BF4M1013C	156.7@2300	120	61.3	569@1400	129	40.1	DDI, TC, CAC,		
3DZXL07.1034	CE109	BF4M1013C	152.7@2300	117	59.7	540@1400	124	38.5	DDI, TC, CAC,		
3DZXL07.1034	CE101	BF4M1013C	142@2300	109	55.7	512@1400	118	36.7	DDI, TC, CAC,		
3DZXL07.1034	CE96	BF4M1013C	135.3@2300	105	53.6	483@1400	112	34.8	DDI, TC, CAC,		
3DZXL07.1034	CE109/1	BF4M1013C	151.9@2200	120	58.6	569@1400	129	40.1	DDI, TC, CAC,		
3DZXL07.1034	CE106/1	BF4M1013C	147.8@2200	116	56.7	540@1400	124	38.5	DDI, TC, CAC,		
6DZXL07.1034	CE99	BF4M1013C	138.5@2200	109	53.2	512@1400	118	36.7	DDI, TC, CAC,		
6DZXL07.1034	CE94/2	BF4M1013C	131.8@2200	105	51.3	483@1400	112	34.8	DDI, TC, CAC,		
6DZXL07.1034	CE106/2	BF4M1013C	147.1@2100	120	55.9	569@1400	132	41	DDI, TC, CAC,		
6DZXL07.1034	CE102	BF4M1013C	141.7@2100	116	54.1	540@1400	124	38.5	DDI, TC, CAC,		
6DZXL07.1034	CE97	BF4M1013C	135@2100	113	52.7	512@1400	118	36.7	DDI, TC, CAC,		
6DZXL07.1034	CE92	BF4M1013C	128.3@2100	106	49.4	483@1400	112	34.8	DDI, TC, CAC,		
6DZXL07.1034	CE102/1	BF4M1013C	141.1@2000	120	53.3	569@1400	132	41	DDI, TC, CAC,		
6DZXL07.1034	CE99/2	BF4M1013C	137@2000	118	52.4	540@1400	124	38.5	DDI, TC, CAC,		
6DZXL07.1034	CE94/1	BF4M1013C	130.3@2000	111	49.3	512@1400	118	36.7	DDI, TC, CAC,		
6DZXL07.1034	CE88	BF4M1013C	122.3@2000	106	47.1	483@1400	112	34.8	DDI, TC, CAC,		
6DZXL07.1034	DE97	BF4M1013C	133.2@1800	121	48.3	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE92	BF4M1013C	126.5@1800	125	49.9	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE88	BF4M1013C	121.1@1800	110	43.9	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE103	BF4M1013C	141.5@1846	126	51.6	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE93	BF4M1013C	128.1@1846	113	46.3	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE106	BF4M1013C	146.4@2000	119	52.8	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE96	BF4M1013C	133@2000	108	47.9	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE110	BF4M1013C	154.9@2400	103	54.9	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	DE100	BF4M1013C	141.5@2400	94	50.1	n.a.@n.a.	0	0	DDI, TC, CAC		
6DZXL07.1034	CE118	BF4M1013EC	158.2@2300	120	61.3	577@1400	129	40.1	DDI, TC, CAC,		
6DZXL07.1034	CE115	BF4M1013EC	154.2@2300	117	59.7	548@1400	124	38.5	DDI, TC, CAC,		
6DZXL07.1034	CE107	BF4M1013EC	143.4@2300	119	60.8	520@1400	118	36.7	DDI, TC, CAC,		

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1939
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesels only)					
3DZXL07.1034	CE102/2	BF4M1013EC	136.7@2300	105	53.6	491@1400	112	34.8	DDI, TC, CAC,	
3DZXL07.1034	CE114	BF4M1013EC	152.8@2200	119	58.1	569@1400	129	40.1	DDI, TC, CAC,	
3DZXL07.1034	CE111	BF4M1013EC	148.8@2200	116	56.7	548@1400	124	38.5	DDI, TC, CAC,	
3DZXL07.1034	CE104	BF4M1013EC	139.4@2200	108	52.7	512@1400	118	36.7	DDI, TC, CAC,	
3DZXL07.1034	CE99/2	BF4M1013EC	132.7@2200	105	51.3	491@1400	112	34.8	DDI, TC, CAC,	
3DZXL07.1034	CE110	BF4M1013EC	147.5@2100	121	56.4	577@1400	132	41	DDI, TC, CAC,	
3DZXL07.1034	CE106/2	BF4M1013EC	142.1@2100	116	54.1	548@1400	124	38.5	DDI, TC, CAC,	
3DZXL07.1034	CE101/1	BF4M1013EC	135.4@2100	111	51.7	520@1400	118	36.7	DDI, TC, CAC,	
3DZXL07.1034	CE96/1	BF4M1013EC	128.7@2100	107	49.9	491@1400	112	34.8	DDI, TC, CAC,	
3DZXL07.1034	CE106/3	BF4M1013EC	142.1@2000	120	53.3	577@1400	132	41	DDI, TC, CAC,	
3DZXL07.1034	CE103	BF4M1013EC	138.1@2000	117	51.9	548@1400	124	38.5	DDI, TC, CAC,	
3DZXL07.1034	CE98	BF4M1013EC	131.4@2000	113	50.2	520@1400	118	36.7	DDI, TC, CAC,	
3DZXL07.1034	CE92/1	BF4M1013EC	123.3@2000	105	46.6	491@1400	111	34.5	DDI, TC, CAC,	
3DZXL07.1034	DE110/1	BF4M1013EC	147.5@1800	138	55.1	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE105	BF4M1013EC	140.8@1800	131	52.3	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE100/1	BF4M1013EC	134.1@1800	125	49.9	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE104	BF4M1013EC	139.4@1846	127	52	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE95	BF4M1013EC	127.3@1846	116	47.5	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE108	BF4M1013EC	144.8@2000	122	54.2	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE98	BF4M1013EC	131.4@2000	110	48.8	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE113	BF4M1013EC	151.5@2400	106	56.5	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	DE103/1	BF4M1013EC	138.1@2400	97	51.7	n.a.@n.a.	0	0	DDI, TC, CAC	
3DZXL07.1034	CE125	BF4M1013FC	167.6@2300	129	65.9	630@1500	139	46.3	DDI, TC, CAC,	
3DZXL07.1034	CE119	BF4M1013FC	159.5@2300	121	61.8	604@1500	135	44.9	DDI, TC, CAC,	
3DZXL07.1034	CE112/1	BF4M1013FC	150.1@2300	114	58.2	578@1500	127	42.3	DDI, TC, CAC,	
3DZXL07.1034	CE106/4	BF4M1013FC	142.1@2300	108	55.1	552@1500	122	40.6	DDI, TC, CAC,	
3DZXL07.1034	CE129	BF4M1013FC	172.9@2300	134	68.4	692@1400	155	48.2	DDI, TC, CAC,	
3DZXL07.1034	CE126	BF4M1013FC	168.9@2300	130	66.4	672@1400	147	45.7	DDI, TC, CAC,	

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Engine Model Summary Template

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Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)/@peak torque Device Per SAE J193C	9.Emission Control
3DZXL07.1034	CE120	BF4M1013FC	160.9@2300	124	63.3	645@1400	141	43.8	DDI, TC, CAC,
3DZXL07.1034	CE113	BF4M1013FC	151.5@2300	116	59.2	617@1400	134	41.6	DDI, TC, CAC,
3DZXL07.1034	CE123	BF4M1013FC	164.9@2200	131	64	630@1500	139	46.3	DDI, TC, CAC,
3DZXL07.1034	CE117	BF4M1013FC	156.8@2200	121	59.1	604@1500	135	44.9	DDI, TC, CAC,
3DZXL07.1034	CE111/1	BF4M1013FC	148.8@2200	116	56.7	578@1500	127	42.3	DDI, TC, CAC,
3DZXL07.1034	CE105	BF4M1013FC	140.8@2200	110	53.7	552@1500	122	40.6	DDI, TC, CAC,
6DZXL07.1034	CE129/1	BF4M1013FC	172.9@2200	138	67.4	700@1400	154	47.9	DDI, TC, CAC,
6DZXL07.1034	CE125/1	BF4M1013FC	167.6@2200	133	65	672@1400	147	45.7	DDI, TC, CAC,
6DZXL07.1034	CE119/1	BF4M1013FC	159.5@2200	126	61.5	645@1400	141	43.8	DDI, TC, CAC,
6DZXL07.1034	CE112/2	BF4M1013FC	150.1@2200	109	53.2	617@1400	134	41.6	DDI, TC, CAC,
6DZXL07.1034	CE120/1	BF4M1013FC	160.9@2100	131	61.1	630@1500	142	47.3	DDI, TC, CAC,
6DZXL07.1034	CE113/1	BF4M1013FC	151.5@2100	123	57.3	604@1500	136	45.3	DDI, TC, CAC,
6DZXL07.1034	CE109/2	BF4M1013FC	146.1@2100	118	55	578@1500	130	43.3	DDI, TC, CAC,
6DZXL07.1034	CE103/1	BF4M1013FC	138.1@2100	113	52.7	552@1500	124	41.3	DDI, TC, CAC,
6DZXL07.1034	CE129/2	BF4M1013FC	172.9@2100	142	66.2	700@1400	154	47.9	DDI, TC, CAC,
6DZXL07.1034	CE124	BF4M1013FC	166.2@2100	137	63.9	672@1400	147	45.7	DDI, TC, CAC,
6DZXL07.1034	CE118/1	BF4M1013FC	158.2@2100	129	60.1	645@1400	143	44.4	DDI, TC, CAC,
6DZXL07.1034	CE111/2	BF4M1013FC	148.8@2100	122	56.9	617@1400	134	41.6	DDI, TC, CAC,
6DZXL07.1034	CE117/1	BF4M1013FC	156.8@2000	132	58.6	630@1500	142	47.3	DDI, TC, CAC,
6DZXL07.1034	CE112/3	BF4M1013FC	150.1@2000	128	56.8	604@1500	136	45.3	DDI, TC, CAC,
6DZXL07.1034	CE107/1	BF4M1013FC	143.4@2000	120	53.3	578@1500	130	43.3	DDI, TC, CAC,
6DZXL07.1034	CE101/2	BF4M1013FC	135.4@2000	115	51.1	552@1500	124	41.3	DDI, TC, CAC,
6DZXL07.1034	CE128	BF4M1013FC	171.6@2000	146	64.8	700@1400	154	47.9	DDI, TC, CAC,
6DZXL07.1034	CE122	BF4M1013FC	163.6@2000	140	62.2	672@1400	147	45.7	DDI, TC, CAC,
6DZXL07.1034	CE116	BF4M1013FC	155.5@2000	132	58.6	645@1400	141	43.8	DDI, TC, CAC,
6DZXL07.1034	CE110/1	BF4M1013FC	147.5@2000	125	55.5	617@1400	134	41.6	DDI, TC, CAC,
6DZXL07.1034	DE119	BF4M1013FC	159.5@2400	112	59.7	n.a.@n.a.	0	0	DDI, TC, CAC
6DZXL07.1034	DE108/1	BF4M1013FC	144.8@2400	101	53.8	n.a.@n.a.	0	0	DDI, TC, CAC

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Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)		4.Fuel Rate: mm/stroke @ peak HP (for diesel only)		5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque		8.Fuel Rate: (lbs/hr)@peak torque Device Per SAE J193C	9.Emission Control
			118@2200	94	45.9	43.5	51.1	46.5	447@1400	112	34.8		
6DZXL07.1034	CE88	BF4M1013EC	118@2200	94	45.9	43.5	51.1	46.5	447@1400	112	34.8	DDI, TC, CAC,	
6DZXL07.1034	CE86/2	BF4M1013EC	115.3@2000	98	43.5	51.1	46.5	447@1400	111	34.5	DDI, TC, CAC,		
6DZXL07.1034	CE93	BF4M1013C	127.2@2300	100	45.9	43.5	51.1	447@1400	103	32	DDI, TC, CAC,		
6DZXL07.1034	CE84	BF4M1013C	115.1@2300	91	46.5	44.7	44.7	447@1400	103	32	DDI, TC, CAC,		
6DZXL07.1034	CE86	BF4M1013C	117.6@2200	94	45.9	44.7	44.7	447@1400	103	32	DDI, TC, CAC,		
6DZXL07.1034	CE129	BF6M1013EC	172.9@2300	90	68.9	67.4	67.4	725@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE129/1	BF6M1013EC	172.9@2200	92	67.4	65.7	65.7	727@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE129/2	BF6M1013EC	172.9@2100	94	65.7	61.9	61.9	725@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE125	BF6M1013EC	167.6@2000	93	61.9	67.4	67.4	725@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE122/1	BF6M1013C	168.9@2300	88	66.7	66.7	66.7	725@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE125	BF6M1013C	171.6@2200	91	65.7	65.7	65.7	725@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE126	BF6M1013C	172.9@2100	94	58.7	61.9	61.9	727@1400	105	52.4	DDI, TC, CAC,		
6DZXL07.1034	CE110	BF6M1013C	151.5@2100	84	59	59	59	552@1300	83	41.4	DDI, TC, CAC,		
6DZXL07.1034	CE122	BF6M1013C	167.6@2000	93	64.3	64.3	64.3	595@1400	90	47.9	DDI, TC, CAC,		
6DZXL07.1034	CE110T	BF6M1013EC	147.7@2300	77	67.4	69.7	69.7	643@1500	97	53.3	DDI, TC, CAC,		
6DZXL07.1034	CE121T	BF6M1013EC	161.9@2300	84	65.7	65.7	65.7	655@1200	98	47.3	DDI, TC, CAC,		
6DZXL07.1034	CE128T	BF6M1013EC	171.1@2300	88	65.7	65.7	65.7	609@1200	91	42.4	DDI, TC, CAC,		
6DZXL07.1034	CE129T	BF6M1013EC	172.8@2350	89	45.5	45.5	45.5	555@1400	126	39.1	DDI, TC, CAC,		
6DZXL07.1034	CE122T	BF6M1013EC	163.1@2350	84	46.4	46.4	46.4	555@1400	131	40.7	DDI, TC, CAC,		
6DZXL07.1034	CE92	D5DEBE2	123.3@1900	108	44.7	44.7	44.7	555@1400	118	36.7	DDI, TC, CAC,		
6DZXL07.1034	CE92/2	BF4M1013EC	123.3@1900	110	47.9	47.9	47.9	555@1400	131	40.7	DDI, TC, CAC,		
6DZXL07.1034	CE90	BF4M1013EC	120.6@1800	112	48.5	48.5	48.5	555@1400	131	40.7	DDI, TC, CAC,		
6DZXL07.1034	CE93	BF4M1013EC	124.7@2000	108	44.3	44.3	44.3	525@1400	123	38.2	DDI, TC, CAC,		
6DZXL07.1034	CE94	BF4M1013EC	126@2100	104	45.3	45.3	45.3	525@1400	123	38.2	SPL		
6DZXL07.1034	CE87	BF4M1013EC	116.6@1900	105	46.6	46.6	46.6	525@1400	123	38.2	DDI, TC, CAC,		
6DZXL07.1034	CE88/1	BF4M1013EC	118@2000	102	41.7	41.7	41.7	500@1400	118	36.7	DDI, TC, CAC,		
6DZXL07.1034	CE89	BF4M1013EC	119.3@2100	100									
6DZXL07.1034	CE82	BF4M1013EC	109.9@1900	99									

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Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J193C
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)					
6DZXL07.1034	CE83	BF4M1013EC	111.3@2000	97	43.1	500@1400	118	36.7	DDI, TC, CAC,	
6DZXL07.1034	CE84	BF4M1013EC	112.6@2100	94	43.8	500@1400	118	36.7	DDI, TC, CAC,	
6DZXL07.1034	DE122/1	BF4M1013FC	163.6@1800	146	58.3	n.a.@n.a.	0	0	DDI, TC, CAC	
6DZXL07.1034	DE120	BF4M1013EC	160.9@1800	144	57.5	n.a.@n.a.	0	0	DDI, TC, CAC	
6DZXL07.1034	CE129	D7DDBE2	172.9@2100	94	65.7	727@1400	105	52.4	DDI, TC, CAC,	
6DZXL07.1034	CE111/1	BF4M1013EC	148.8@2200	116	56.7	569@1400	129	40.1	DDI, TC, CAC,	

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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)
2006	6DZXL07.1053	7.1	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Loader, Other 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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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):

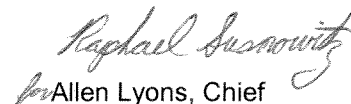
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50
		CERT	-	-	3.4	1.1	.15	3	1	6

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 30TH day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Attachment
U-6 DB-0164

Engine Model Summary Template

Return to Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)	7.Fuel Rate:		8.Fuel Rate: (lbs/hr)@peak torque	9.E Devic
				mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	mm/stroke @ peak torque	mm/stroke @ peak torque					
6DZXL07.1053	C3G150	D7EGCE3	201.1@ 2100	114	79.7	703.6@1550	149	76.9	75, 607, CAC			
6DZXL07.1053	C3G165	D7EGBE3	221.2@ 2100	124	86.7	774.4@1550	161	83.1				
6DZXL07.1053	C3G180	D7EGAE3	241.3@ 2100	135	94.4	811.3@1550	171	85.4				
6DZXL07.1053	C3G162	D7ELAE3	217.2@ 2100	123	86.0	785.5@1550	165	82.4				
6DZXL07.1053	C3G150A	D7ELBE3	201.1@ 2100	114	79.7	785.5@1550	165	82.4				
6DZXL07.1053	C3G153	D7EEAE3	205.1@ 1800	131	78.5	711.7@1550	146	65.6				
6DZXL07.1053	C3G138	D7EEBE3	185.0@ 1800	120	71.9	641.6@1550	131	58.9				
6DZXL07.1053	C3G181	TAD760VE	242.7@ 2300	126	96.5	811.3@1550	170	84.9				
6DZXL07.1053	C3G1200	TAD760VE	268.2@ 2300	138	105.7	811.3@1550	173	86.4				

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0184 New Off-Road Compression-Ignition Engines
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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)
2006	6DZXL01.6050	1.17, 1.56	Diesel	5000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Indirect Diesel Injection			Crane, Loader, Tractor, Pump, Compressor	

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
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT	-	-	5.6	0.7	0.20	4	3	6

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Manufacturer:	Deutz AG
Engine category:	Nonroad CI
EPA Engine Family:	6DZXL01.6050
Mfr Family Name:	D2008L3, D2008L4
Process Code:	New Submission

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
CE20	D2008L03	26.8@3000	24	11.9	71@1800	26.5	8.8	IDI
CE19,3	D2008L03	25.8@2800	25	11.6	71@1800	26	8.6	IDI
CE18,4	D2008L03	24.6@2600	25	10.8	71@1800	26	8.6	IDI
CE18,1	D2008L03	24.2@2500	26	10.8	71@1800	26	8.6	IDI
CE17,5	D2008L03	23.4@2400	26	10.3	71@1800	26	8.6	IDI
CE26,6	D2008L04	26.6@35.6@3000	24	15.9	92@1800	32	11.1	IDI
CE25,6	D2008L04	34.3@2800	24	14.9	92@1800	32	11.1	IDI
CE24,5	D2008L04	32.8@2600	24	13.8	92@1800	32	11.1	IDI
CE24	D2008L04	32.1@2500	24	13.3	92@1800	32	11.1	IDI
CE23	D2008L04	30.8@2400	24	12.7	92@1800	32	11.1	IDI