



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 (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):

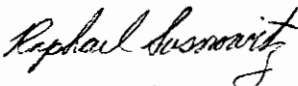
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT	-	-	6.4	0.8	0.10	2	2	3

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.


Allen Lyons, Chief
Mobile Source Operations Division

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Engine Model Summary Template

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6-8-03-0168

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	9.Emission Control Device Per SAE J193C
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,
6DZXL06.1038	CE74,9	BF4M2012	100.4@2500	74.5	41.3	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,9/1	BF4M2012	100.4@2500	74.5	41.3	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE74,9/2	BF4M2012	100.4@2400	76	40.5	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,9/3	BF4M2012	100.4@2400	76	40.5	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE74,9/4	BF4M2012	100.4@2300	78	39.8	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,9/5	BF4M2012	100.4@2200	80	39.1	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74/1	BF4M2012	99.2@2300	77	39.3	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE65	BF4M2012	87.1@2500	64.5	35.8	333@1400	76	25.3	DDI, TC,
6DZXL06.1038	CE66/2	BF4M2012	88.5@1800	79.5	31.7	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE64/1	BF4M2012	85.8@1800	77	30.7	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE62/1	BF4M2012	83.1@1800	75	29.9	352@1400	80	26.6	DDI, TC,

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Engine Model Summary Template

1-2-013-0168

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
6DZXL06.1038	CE60/1	BF4M2012	80.4@1800	72.5	28.9	333@1400	76	25.3	DDI, TC, SPL
6DZXL06.1038	CE68/2	BF4M2012	91.1@1900	79.5	33.5	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE66/3	BF4M2012	88.5@1900	77	32.5	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE63/1	BF4M2012	84.4@1900	73.5	31	352@1400	80	26.6	DDI, TC,
6DZXL06.1038	CE60/2	BF4M2012	80.4@1900	70	29.5	333@1400	76	25.3	DDI, TC,
6DZXL06.1038	CE60/3	BF4M2012	80.4@2100	66.5	31	300@1400	69	22.9	DDI, TC,
6DZXL06.1038	CE60/4	BF4M2012	80.4@2200	65	31.7	300@1400	69	22.9	DDI, TC,
6DZXL06.1038	CE60/5	BF4M2012	80.4@2300	63	32.1	300@1400	69	22.9	DDI, TC,
6DZXL06.1038	CE74,9/1	BF6M2012	100.4@2300	51.5	39.4	400@1200	60	25.9	DDI, TC,
6DZXL06.1038	CE74,9/2	BF6M2012	100.4@2200	53.5	39.2	400@1200	60	25.9	DDI, TC,
6DZXL06.1038	CE74,9/3	BF6M2012	100.4@2200	53.5	39.2	430@1200	64.5	27.9	DDI, TC,
6DZXL06.1038	CE74,9/4	BF6M2012	100.4@2100	56.5	39.5	430@1200	64.5	27.9	DDI, TC,
6DZXL06.1038	CE74,9/5	BF6M2012	100.4@2000	59	39.3	470@1200	70.5	30.5	DDI, TC,
6DZXL06.1038	CE74,9/6	BF6M2012	100.4@1900	62	39.2	470@1200	70.5	30.5	DDI, TC,
6DZXL06.1038	CE74,9/7	BF6M2012	100.4@1800	65.5	39.2	500@1200	70.5	30.5	DDI, TC,
6DZXL06.1038	CE74,5	D4DRAE2	99.9@2200	80	39.1	390@1400	75	24.9	DDI, TC,
6DZXL06.1038	CE73	D4DEAE2	97.8@2100	79.8	37.2	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,9	D4DLAE2	100.4@2200	80	39.1	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE64	D4DCAE2	85.8@2200	68	33.2	390@1400	82	27.3	DDI, TC,
6DZXL06.1038	CE70	D4DCBE2	93.8@2200	80	39.1	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,5	D4DCC2	99.9@2200	80	39.1	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74,9/2	D4DCDE2	100.4@2500	74.5	41.3	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE62	D4DDAE2	83.1@2100	68	31.7	333@1400	76	25.3	DDI, TC,
6DZXL06.1038	CE69	D4DDBE2	92.5@2100	75.5	35.2	371@1400	85	28.3	DDI, TC,
6DZXL06.1038	CE59T	BF4M2012	86.8@2300	67.5	34.4	340@1300	78	25.9	DDI, TC,
6DZXL06.1038	CE61T	BF4M2012	87.8@2300	70	35.7	345@1300	81	26.9	DDI, TC,
6DZXL06.1038	CE56T	BF4M2012	81.1@2300	65	33.2	300@1300	71	23.6	DDI, TC,
6DZXL06.1038	CE66	TD420VE	88.5@2100	72	33.5	352@1400	80	26.6	DDI, TC,

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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: (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 J1933
6DZXL06.1038	CE73	TD420VE	97.8@2100	79.8	37.2	390@1400	90	29.9	DDI, TC, SPL
6DZXL06.1038	CE70	TD420VE	93.8@2300	72.5	37	352@1400	80	26.6	DDI, TC,
6DZXL06.1038	CE74,9	TD420VE	100.4@2300	78	39.8	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	CE74	TD420VE	99.2@2500	73.5	40.8	352@1400	80	26.6	DDI, TC,
6DZXL06.1038	CE74,9/1	TD420VE	100.4@2500	74.5	41.3	390@1400	90	29.9	DDI, TC,
6DZXL06.1038	DE66	BF4M2012	88.5@1800	82.5	32.9	n.a.@n.a.	0	0	DDI, TC,
6DZXL06.1038	DE70	BF4M2012	93.8@1800	88	35.1	n.a.@n.a.	0	0	DDI, TC,
6DZXL06.1038	DE70/1	BF4M2012	93.8@1846	87	35.6	n.a.@n.a.	0	0	DDI, TC,
6DZXL06.1038	DE74,9	BF4M2012	100.4@2000	87	38.6	n.a.@n.a.	0	0	DDI, TC,
6DZXL06.1038	DE74,9/1	BF4M2012	100.4@2400	76	40.5	n.a.@n.a.	0	0	DDI, TC,
6DZXL06.1038	CE71T	BF4M2012	94.5@2300	73	37.3	360@1300	81	26.9	DDI, TC,