



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 engine 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)
2008	8PKXL06.6PJ1	6.6	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Emission Control Module, Charge Air Cooler			Crane, Loaders, Tractor, Dozer, Pump, Compressor, 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 (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
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.6	1.8	0.17	16	11	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 21 day of December 2007.


Annette Hebert, Chief
Mobile Source Operations Division

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 ³ /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 ³ /stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
									ECM DDI TAA TC CAC
8PKXL06.6PJ1	1	2636/2200	249@2200	133.6	96.6	774@1400	158.1	72.8	ECM DDI TAA
8PKXL06.6PJ1	2	2640/2200	237@2200	127.5	92.2	701@1500	143.5	70.8	ECM DDI TAA
8PKXL06.6PJ1	3	2642/2200	275@2200	140.5	101.6	702@1400	144	66.3	ECM DDI TAA
8PKXL06.6PJ1	4	2478/2200	225@2200	117.3	84.9	725@1400	146.6	67.5	ECM DDI TAA
8PKXL06.6PJ1	6	2548/2200	188@2200	99.3	71.8	656@1400	134.5	61.9	ECM DDI TAA
8PKXL06.6PJ1	7	2550/2200	182@2200	94.6	68.4	592@1400	123.4	56.8	ECM DDI TAA
8PKXL06.6PJ1	8	2554/2200	213@2200	114.4	82.8	687@1400	138.8	63.9	ECM DDI TAA
8PKXL06.6PJ1	9	2558/2200	196@2200	105.5	76.3	643@1400	133.5	61.5	ECM DDI TAA
8PKXL06.6PJ1	10	2596/2000	231@2000	128.4	84.4	693@1400	149.5	68.8	ECM DDI TAA
8PKXL06.6PJ1	11	2674/2000	171@2000	99.5	65.4	630@1400	128.6	59.2	ECM DDI TAA
8PKXL06.6PJ1	12	2784/2000	177@2000	101	66.4	646@1400	129	59.4	ECM DDI TAA
8PKXL06.6PJ1	13	2788/2000	197@2000	112	73.7	723@1400	150	69.0	ECM DDI TAA
8PKXL06.6PJ1	14	2782/2000	172.3@2000	101	66.4	627@1400	129	59.4	ECM DDI TAA
8PKXL06.6PJ1	15	3068/2200	182@2200	95	68.7	592@1400	115	52.9	ECM DDI TAA
8PKXL06.6PJ1	16	3036/1800	209@1800	128.6	76.1	591@1350	141.7	62.9	ECM DDI TAA
8PKXL06.6PJ1	17	3002/2200	173@2200	91	65.8	575@1400	120	55.2	ECM DDI TAA
8PKXL06.6PJ1	18	2552/2200	193@2200	99	71.6	624@1400	126	58	ECM DDI TAA
8PKXL06.6PJ1	19	3004/2200	185@2200	97	70.2	611@1400	125	57.5	ECM DDI TAA
8PKXL06.6PJ1	20	3006/2200	203@2200	110.3	79.8	680@1400	145.9	67.2	ECM DDI TAA
8PKXL06.6PJ1	21	3052/2500	189@2500	92	75.6	594@1500	121	59.7	ECM DDI TAA
8PKXL06.6PJ1	22	3076/2100	197@2100	110	76	662@1400	136	62.6	ECM DDI TAA
8PKXL06.6PJ1	23	3074/2100	175@2100	99	68.4	662@1400	136	62.6	ECM DDI TAA
8PKXL06.6PJ1	24	3220/2000	224@2000	129.3	85	533@1300	151.1	64.6	ECM DDI TAA
8PKXL06.6PJ1	25	2694/1800	274@1800	158.2	93.6	800@1800	158.2	93.6	ECM DDI TAA
8PKXL06.6PJ1	26	3246/2100	197@2100	109.1	75.3	662@1400	136.3	62.7	ECM DDI TAA
8PKXL06.6PJ1	27	3226/2000	197@2000	111.8	73.5	723@1400	143.9	66.2	ECM DDI TAA

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 diesels 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
8PKXL06.6PJ1	28	3228/2000	177@2000	102.4	67.3	646@1400	131.7	60.6	ECM DDI TAA
8PKXL06.6PJ1	29	3288/2200	173@2200	90	65.1	575@1400	118	54.3	ECM DDI TAA
8PKXL06.6PJ1	30	3290/2200	182.4@2200	99	71.6	592@1400	124	57.1	ECM DDI TAA
8PKXL06.6PJ1	31	3294/2200	193@2200	102	73.8	624@1400	129	59.4	ECM DDI TAA
8PKXL06.6PJ1	32	3300/2200	185.1@2200	98	70.9	611@1400	127	58.5	ECM DDI TAA
8PKXL06.6PJ1	33	3302/2200	203.2@2200	107	77.4	680@1400	139	64	ECM DDI TAA
8PKXL06.6PJ1	34	3230/2000	172.3@2000	100.2	65.9	533@1400	127.9	58.9	ECM DDI TAA
8PKXL06.6PJ1	35	2682/1800	230@1800	134.5	79.6	670@1800	134.5	79.6	ECM DDI TAA
8PKXL06.6PJ1	36	2690/1800	217@1800	127.6	75.5	632@1800	127.6	75.5	ECM DDI TAA
8PKXL06.6PJ1	37	3210/2000	181@2000	100.7	66.2	662@1400	134.6	62	ECM DDI TAA
8PKXL06.6PJ1	38	3214/2000	186@2000	104.6	68.8	682@1400	136.8	63	ECM DDI TAA
8PKXL06.6PJ1	39	3216/2000	191@2000	108.3	71.2	699@1400	138.2	63.6	ECM DDI TAA
8PKXL06.6PJ1	40	3244/2100	175@2100	97	67	662@1400	135	62.1	ECM DDI TAA
8PKXL06.6PJ1	41	3286/2200	172.9@2200	95	68.7	640@1400	133	61.2	ECM DDI TAA
8PKXL06.6PJ1	42	3292/2200	187.7@2200	99	71.6	656@1400	135.2	62.2	ECM DDI TAA
8PKXL06.6PJ1	43	3296/2200	195.8@2200	102	73.8	643@1400	134	61.7	ECM DDI TAA
8PKXL06.6PJ1	44	3298/2200	196@2200	102.4	74.1	643@1400	133.6	61.5	ECM DDI TAA
8PKXL06.6PJ1	45	3304/2200	212.6@2200	109.4	79.1	687@1400	141.5	65.1	ECM DDI TAA
8PKXL06.6PJ1	46	3306/2000	224@2000	125	82.2	730@1300	145	62	ECM DDI TAA
8PKXL06.6PJ1	47	3322/2200	225.2@2200	117.6	85.1	727@1400	148.4	68.3	ECM DDI TAA
8PKXL06.6PJ1	48	3318/1800	202.5@1800	124.6	73.7	680@1400	135.8	62.5	ECM DDI TAA
8PKXL06.6PJ1	49	3324/2200	249.3@2200	127.4	92.2	774@1400	153.4	70.6	ECM DDI TAA
8PKXL06.6PJ1	50	3330/2000	201@2000	116	76.3	739@1400	150	69	ECM DDI TAA
8PKXL06.6PJ1	51	3334/2200	193@2200	103.1	74.6	624@1400	127.6	58.7	ECM DDI TAA
8PKXL06.6PJ1	52	3418/2200	182.4@2200	97.3	70.4	592@1400	122.6	56.4	ECM DDI TAA
8PKXL06.6PJ1	53	3402/2200	172.9@2200	92.5	66.9	640@1400	131.5	60.4	ECM DDI TAA

Tc CAC

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Engine Model Summary Template

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Engine Family	1. Engine Code	2. Engine Model	3. B-IP@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
8PKXL066P11	5	3328/2000	211.9@2000	119.2	78.4	775@1400	158.8	73.1	ECM DDITAA TC CAC
8PKXL066P11	54	3488/2200	182.4@1900	100.7	62.9	592@1400	125.7	57.9	ECM DDITAA ↓
8PKXL066P11	55	3478/2200	202.5@2200	107.7	77.9	680@1400	140.6	64.7	ECM DDITAA ↓