

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)
2006	6PKXL06.6PJ1	6.6	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Crane, Tractor, Pump and Generator	

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
130 ≤ KW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.6	1.8	0.15	16	11	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 11<sup>TH</sup> day of January 2006.



Allen Lyons, Chief  
 Mobile Source Operations Division

# Engine Model Summary Form

Manufacturer: **Perkins Engines Co. Ltd.**

Engine category: **Nonroad CI**

EPA Engine Family:

Mfr Family Name:

Process Code: **Running Change**

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
1	2636/2200	249@2200	130	94.0	774	154	70.9	ECM DDI TAA
2	2640/2200	237@2200	124	89.7	701	146	72.0	ECM DDI TAA
3	2642/2200	275@2200	141	102.0	702	144	66.3	ECM DDI TAA
4	2478/2200	225@2200	119	86.1	725	146	67.2	ECM DDI TAA
5	2544/2500	174@2500	88	72.3	513	112	55.2	ECM DDI TAA
6	2548/2200	188@2200	130	94.0	656	150	69.0	ECM DDI TAA
7	2550/2200	182@2200	95	68.7	592	115	52.9	ECM DDI TAA
8	2554/2200	213@2200	110	79.6	687	137	63.1	ECM DDI TAA
9	2558/2200	196@2200	105	76.0	643	132	60.8	ECM DDI TAA
10	2596/2000	231@2000	130	86.0	693	140	64.4	ECM DDI TAA
11	2674/2000	171@2000	99	65.1	630	132	60.8	ECM DDI TAA
12	2784/2000	177@2000	101	66.4	646	131	60.3	ECM DDI TAA
13	2788/2000	197@2000	112	73.7	723	150	69.0	ECM DDI TAA
14	2884/2100	172@2100	130	89.8	653	150	69.0	ECM DDI TAA
15	2886/2100	194@2100	107	73.9	653	136	62.6	ECM DDI TAA
16	3036/1800	209@1800	130	76.9	591	150	69.0	ECM DDI TAA
17	3002/2200	173@2200	94	68.0	413	123	56.6	ECM DDI TAA
18	2552/2200	193@2200	102	73.8	461	128	59.0	ECM DDI TAA
19	3004/2200	185@2200	103	74.3	442	125	57.4	ECM DDI TAA
20	3006/2200	203@2200	106	17.9	485	137	63.1	ECM DDI TAA
21	3052/2200	189@2500	130	94.0	398	150	74.0	ECM DDI TAA

# Engine Model Summary Form

Manufacturer: Perkins Engines Co. Ltd.

Engine category: Nonroad CI

EPA Engine Family:

Mfr Family Name: 6PKXL06.6PJ1

Process Code: Running Change

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
1	2660/1800	174@1800	110	65.1	631	132	60.8	ECM DDI TAA
2	2526/2200	122@2200	85	48.9	354	130	59.8	ECM DDI TAA
3	2598/2100	163@2100	91	62.8	489	106	49.0	ECM DDI TAA
4	2536/2200	128@2200	85	61.5	433	130	59.8	ECM DDI TAA
5	2540/2200	156@2200	86	62.5	504	110	50.6	ECM DDI TAA
6	2952/2200	174@2100	91	62.8	513	109	50.2	ECM DDI TAA
7	2656/2000	121@2000	71	49.2	409	90	41.4	ECM DDI TAA
8	2658/2000	131@2000	85	61.5	450	130	59.8	ECM DDI TAA
9	2662/2000	168@2000	99	65.7	524	110	47.0	ECM DDI TAA
10	2664/1800	166@1800	104	61.8	579	123	56.6	ECM DDI TAA
11	2666/2000	173@2000	98	66.7	553	109	50.2	ECM DDI TAA
12	2714/2100	131@2100	85	58.7	496	130	59.8	ECM DDI TAA
13	2718/2100	151@2100	86	61.2	547	118	54.3	ECM DDI TAA
14	2772/2000	152@2000	93	61.2	551	119	47.0	ECM DDI TAA
15	2774/2000	147@2000	86	56.6	531	114	45.0	ECM DDI TAA
16	2776/2000	142@2000	85	55.9	511	108	42.6	ECM DDI TAA
17	2778/2000	157@2000	95	62.5	570	121	47.7	ECM DDI TAA
18	2780/2000	162@2000	93	61.2	590	125	49.3	ECM DDI TAA
19	2782/2000	172@2000	99	65.1	627	128	58.9	ECM DDI TAA
20	2786/2000	167@2000	96	63.1	610	129	50.9	ECM DDI TAA
21	2962/2200	131@2000	85	55.9	496 lbf.ft@1400r	130	59.8	ECM DDI TAA
22	2984/2200	119@2200	66	47.8	284	88	40.5	ECM DDI TAA
23	2990/2200	135@2200	74	53.5	321	99	45.6	ECM DDI TAA
24	2994/2200	145@2200	85	61.5	346	130	59.8	ECM DDI TAA
25	2998/2200	161@2200	85	61.5	384	130	59.8	ECM DDI TAA
26	3000/2200	162@2200	85	61.5	387	130	59.8	ECM DDI TAA
27	3038/1800	174@1800	110	65.1	507	132	60.8	ECM DDI TAA

# Engine Model Summary Form

**Manufacturer:** Perkins Engines Co. Ltd  
**Engine category:** Nonroad CI  
**EPA Engine Family:** 6PKXL06.6PJ1  
**Mfr Family Name:** PERKINS 1106D-E66TA AND CATERPILLAR  
**Process Code:** Running Change

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
31	3288/2200	173@2200	94	68	575@1400	123	57	ECM DDI TAA
32	3290/2200	182@2200	95	69	592@1400	115	53	ECM DDI TAA
33	3294/2200	193@2200	102	74	624@1400	128	59	ECM DDI TAA
34	3300/2200	185@2200	103	75	611@1400	125	58	ECM DDI TAA
35	3302/2200	202@2200	106	77	680@1400	137	63	ECM DDI TAA

# Engine Model Summary Form

Manufacturer: **Perrkins Engines Co. Ltd.,**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **6PKXL06.6PJ1**  
 Mfr Family Name:  
 Process Code: **Running Change**

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: mmi/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
27	2964/1800	274	158.6	94	800@1800	158.6	94	ECM DDI TAA

# 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		9. Emission Control Device Per SAE J1931
			36	37	38	39	40	41	42	43	44	45	46	47	
6PKXL06.6PJ1	36	2690/1800	217@1800	127.2	75.3	632@1800	127.2	75.3	632@1800	127.2	75.3	ECM DDI TAA			
6PKXL06.6PJ1	37	3210/2200	181@2200	100.7	72.8	662@1400	134.6	62	662@1400	134.6	62	ECM DDI TAA			
6PKXL06.6PJ1	38	3214/2000	186@2000	104.6	68.8	682@1400	136.8	63	682@1400	136.8	63	ECM DDI TAA			
6PKXL06.6PJ1	39	3216/2000	191@2000	108.3	71.2	699@1400	138.2	63.6	699@1400	138.2	63.6	ECM DDI TAA			
6PKXL06.6PJ1	40	3244/2100	175@2100	96.6	63.5	662@1400	140.1	64.5	662@1400	140.1	64.5	ECM DDI TAA			
6PKXL06.6PJ1	41	3286/2000	171@2000	99	65.1	630@1400	132	60.8	630@1400	132	60.8	ECM DDI TAA			
6PKXL06.6PJ1	42	3292/2200	188@2200	98.7	71.4	656@1400	134.3	61.8	656@1400	134.3	61.8	ECM DDI TAA			
6PKXL06.6PJ1	43	3296/2200	196@2200	105	76.0	643@1400	132	60.8	643@1400	132	60.8	ECM DDI TAA			
6PKXL06.6PJ1	44	3298/2200	196@2200	105	76.0	643@1400	132	60.8	643@1400	132	60.8	ECM DDI TAA			
6PKXL06.6PJ1	45	3304/2200	213@2200	110	79.6	687@1400	137	63.1	687@1400	137	63.1	ECM DDI TAA			
6PKXL06.6PJ1	46	3306/2000	224@2000	128.1	84.2	730@1300	152.1	65	730@1300	152.1	65	ECM DDI TAA			
6PKXL06.6PJ1	47	3322/2200	225@2200	119	86.1	727@1400	146	67.2	727@1400	146	67.2	ECM DDI TAA			
6PKXL06.6PJ1	48	3318/1800	202@1800	125.9	74.5	680@1400	135.2	62.2	680@1400	135.2	62.2	ECM DDI TAA			
6PKXL06.6PJ1	49	3324/2200	249@2200	130	94.0	774@1400	154	70.9	774@1400	154	70.9	ECM DDI TAA			
6PKXL06.6PJ1	50	3328/2200	216@2200	119.2	86.2	775@1400	158.8	73.1	775@1400	158.8	73.1	ECM DDI TAA			