

PERKINS ENGINES COMPANY LTD.

EXECUTIVE ORDER U-R-022-0145 New Off-Road Compression-Ignition Engines

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 systems 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)		
2010	APKXL04.4NJ2	4.4	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module			Cranes, 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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT			4.0	2.3	0.24	7	2	11

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 ______ day of November 2009.

Annette Hebert, Chief

Mobile Source Operations Division

Hackment 1 of 1

Engine Model Summary Template

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	ECM DDI TAA 75 CHC				
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9.Emission Control evice Per SAE J193	₹	ECM DDI TAA	ECM DDI TAA	ECM DDI TAA	ECM DDI TAA
Ission (Per SA	JG ₩	S N N	N D	M DC	M DC
9.Em Device	В	B	S	낊	입
te: torque	The same of the sa				
8.Fuel Rate: /hr)@peak to	29.8	26.5	20.9	29.0	28.6
8.Fuel Rate: 9.Emission Control (Ibs/ht)@peak torqueDevice Per SAE J1930			Partie of Sandahara		
ate: Øpeak					
7.Fuel Rate: mm/stroke@peak torque	97.2	86.2	83.7	94.4	93.1
g RPM oss)	400	400	400	400	400
Torque @ RP (SEA Gross)	310@1400	271@1400	268@1400	302@1400	298@1400
P 6.T	က	2	7	3	2
5.Fuel Rate: Ibs/hr) @ peak HP (for diesels only)	8	æ	&	ھ	2
5.Fuel Rate: s/hr) @ peak or diesels on	38.3	33.8	32.8	36.8	36.2
ed) OH					
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (tbs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (for diesels only) (SEA Gross)	5	-		4	_
4.Fuel f stroke @ for diese	79.	70.	68	76.	75.
mm/s (fi					
RPM ross)	2200	2200	2200	2200	89.8@2200
3.BHP@RPM (SAE Gross)	94.5@2200	82.5@2200	80.5@2200	92.5@2200	39.8@
е Мос	3259/2200	3342/2200	3343/2200	3344/2200	3345/2200
Engin	3259	3342	3343	3344	3345
le 2.					
e Cod	1	2	3	4	5
Engin			_	-	
Engine Family 1.Engine Code 2.Engine Model					
Famil	.4NJ2	1.4NJ2	1.4NJ2	4NJ2	.4NJ2
ngine	APKXL04.4NJ2	APKXL04.4NJ2	APKXL04.4NJ2	APKXL04.4NJ2	APKXL04.4NJ2
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