



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	APKXL04.4NM2	4.4	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Mechanical Direct Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter			Crane, Loader, 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
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT	--	--	4.0	0.7	0.25	18	4	29

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 16 day of November 2009.

Annette Hebert, Chief
Mobile Source Operations Division

Attachment 1 of 1

10-30-2009

C-R-022-0148

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	4.Fuel Rate:		5.Fuel Rate:		7.Fuel Rate:		8.Fuel Rate:		9.Emission Control Device Per SAE J1930
			3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	(lbs/hr) @ peak HP	Torque @ RPM (SEA Gross)	mm/stroke@peak torque	(lbs/hr)@peak torque		
APKXL04.4NM2	1	2972/2200	100.4@2200	84.4	40.7	304@1400	98.1	30.1	TC	DDITAA	
APKXL04.4NM2	2	3056/2400	99.9@2400	76.6	40.3	302@1400	96.6	29.6		DDITAA	
APKXL04.4NM2	3	3056/2300	99.9@2300	78.6	39.6	302@1400	96.6	29.6		DDITAA	
APKXL04.4NM2	4	3056/2200	99.9@2200	79.2	38.2	302@1400	96.7	29.7		DDITAA	
APKXL04.4NM2	9	3055/2300	91.2@2300	74.4	37.5	285@1400	93.3	28.6		DDITAA	
APKXL04.4NM2	10	3055/2200	91.2@2200	75.5	36.4	285@1400	93.3	28.6		DDITAA	
APKXL04.4NM2	8	3496/2200	99.9@2200	82	39.5	295@1400	98.1	30.1		DDITAA	
APKXL04.4NM2	11	3500/2200	99.9@2200	83.5	37.4	295@1400	93.3	28.6		DDITAA	
APKXL04.4NM2	12	3500/2300	93.9@2300	76.1	38.4	291@1400	93.6	28.7		DDITAA	
APKXL04.4NM2	13	3499/2200	100.4@2200	83.1	40.1	307@1400	98.1	30.1		DDITAA	

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