

KOHLER COMPANY

EXECUTIVE ORDER U-R-060-0006 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)			
2012	CKHXL.686SF2	0.686	Diesel	3000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
	Indirect Diesel Inje	ection	Loaders, Tractor, Dozer, Pump, Compressor, Generator Set, and 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	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER	POWER STANDARD CLASS CATEGORY		нс	NOx	NMHC+NOx	СО	P M	ACCEL	LUG	PEAK
kW < 19	Tier 4 – Final	Optional STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			5.2	2.9	0.21	1	1	2

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005.

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 December 2011.

Annette Hebert, Chief

Mobile Source Operations Division

Attachment 1061

Engine Model Summary Template

U-R-060-0006 12-12-2011

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 J1930
CKHXL.686SF2	MANAGEMBERTHE PRESSES FRANCE, NTC AS Two ONE SINGLES IN THE PUBLISHED AS	LDW 702	16.8@3600	20.5	8.18	28.0@2200	21.7	5.29	IDI
CKHXL.686SF2		LDW 702	14.8@3000	20.0	6.66	28.0@2000	21.4	4.74	I DI
CKHXL.686SF2		LDW 702GE	8.7@1800	20.0	3.99	FIXED SPEED	FIXED SPEED	FIXED SPEED	IDI
CKHXL.686SF2	THE REST OF SERVICE STREET, ST	LDW 702GE	14.8@3000	20.0	6.66	FIXED SPEED	FIXED SPEED	FIXED SPEED	IDI
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CKHXL.686SF2	orfessingstatements set (1.2011) or or or ordered messional like betyttingstate	LDW 702	13.1@2600	20.0	5.75	28.8@1800	21.0	4.19	IDI
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CKHXL.686SF2	ya sengen ini katangakantaka katali katana kampulara sensah di padi 1989 (1997 (1984) 1984)	LDW 702	17.4@4300	19.5	9.30	28.0@2200	21.7	5.29	IDI
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CKHXL.686SF2	B. V. P. S. Market College Col	KDW 702GE	8.7@1800	20.0	3.99	FIXED SPEED	FIXED SPEED	FIXED SPEED	IDI
CKHXL.686SF2		KDW 702GE	14.8@3000	20.0	6.66	FIXED SPEED	FIXED SPEED	FIXED SPEED	IDI
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CKHXL.686SF2		KDW 702	13.1@2600	20.0	5.75	28.8@1800	21.0	4.19	IDI
CKHXL,686SF2	AND THE RESIDENCE AND THE PROPERTY OF THE PROP	KDW 702	12.1@2400	20.0	5.31	28.8@1800	21.0	4.19	IDI
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