California Environmental Protection Agency

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	CCPXL12.5HPB	12.5	Diesel	8000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
Cooler, (	c Direct Injection, Turbo Oxidation Catalyst, Engi t Gas Recirculation, Peri	ne Control Module.	Loader, Tractor, Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 <u>≤</u> kW <u>≤</u> 560	Tier 4 Interim ALT NOx	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	1.8	N/A	N/A	0.00	N/A	N/A	N/A
		CERT	0.06	1.6		1.5	0.002			

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**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 October 2010.

Annette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Template U-R-001-0429

ATTACHMENT 1 OF 1

10/17/2011

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: P (lbs/hr) @ peak HP (for diesels only)		7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak tor	rque 9.Emission Control Device Per SAE J1930
CCPXL12.5HPB	Cert Test 1	C13	500@1900	275	175	1738@1500	337	170 X	DFI,TC,ECM,CAC,EGR,PT <b>C</b> x
CCPXL12.5HPB	Cert Test 2		503@1500	334	169	NA		<u>NA  '</u>	DFI,TC,ECM,CAC,EGR,PTOx
CCPXL12.5HPB	1 - 500/1900	C13	500@1900	279	178	1735@1500	342	173	DFI,TC,ECM,CAC,EGR,PTOx
CCPXL12.5HPB	2 - 428/1800	C13	371@1870	209	132	1345@1650	260	144	DFI,TC,ECM,CAC,EGR,PTQx
CCPXL12.5HPB	3 - 428/1800	C13	371@1870	217	136	1345@1650	262	145	DFI,TC,ECM,CAC,EGR,PTO
CCPXL12.5HPB	4 - 380/2100	C13	280@2200	159	118	1529@1300	297	159	DFI,TC,ECM,CAC,EGR,PTQ
CCPXL12.5HPB	5 - 443/1900	C13	443@1900	242	155	1509@1400	293	138	DFI,TC,ECM,CAC,EGR,PTO
CCPXL12.5HPB	6 - 475/2100	C13	207@2300	117	90	1603@1400	313	147	DFI,TC,ECM,CAC,EGR,PTO
CCPXL12.5HPB	7 - 520/2100	C13	226@2300	121	93	1755@1400	344	162	DFI,TC,ECM,CAC,EGR,PTOx
CCPXL12.5HPB	8 - 378/2000	C13	323@2100	183	129	1555@1300	296	129	DFI,TC,ECM,CAC,EGR,PTOx
CCPXL12.5HPB	9 - 385/2100	C13	167@2300	107	83	1300@1400	257	130	DFI,TC,ECM,CAC,EGR,PTOx
CCPXL12.5HPB	10 - 415/2100	C13	180@2300	108	84	1401@1400	275	130	DFI,TC,ECM,CAC,EGR,PT
CCPXL12.5HPB	11 - 440/2100	C13	191@2300	132	102	1485@1400	304	143 🖌	DFI,TC,ECM,CAC,EGR,PTO