

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)
2014	ECPXL09.3HPB	9.3	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Oxidation Catalyst, Engine Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer			Tractor, Loader, Motor Grader	

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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final/ALT 20% NOx	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	1.8	--	N/A	N/A	N/A	N/A	N/A
		CERT	0.06	1.6	--	0.2	0.004	--	--	--

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.

This Executive Order hereby cancels and replaces Executive Order U-R-001-0484 dated September 06, 2013.

Executed at El Monte, California on this 9th day of December 2013.

Erik White, Chief
 Mobile Source Operations Division

Engine Model Summary Template

U-R-001-0484-1

4/24/2014

R/C

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
ECPXL09.3HPB	Cert Test 1	C9.3	361@1900	193	123	1252@1400	249	117	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	Cert Test 2	C9.3	409@1900	226	144	1413@1400	305	144	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	1 - 224/2100	C9.3	202@2150	111	80	853@1000	175	59	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	2 - 244/2100	C9.3	220@2150	127	92	934@1000	175	59	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	3 - 264/2100	C9.3	239@2150	133	96	1013@1000	183	62	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	4 - 284/2100	C9.3	256@2150	138	100	1094@1000	228	77	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	5 - 316/1800	C9.3	272@1880	164	104	1049@1600	208	105	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	5A - 316/1800	C9.3	272@1880	164	104	1049@1600	208	105	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	6 - 316/1800	C9.3	272@1880	164	104	1049@1600	203	102	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	6A - 316/1800	C9.3	272@1880	164	104	1049@1600	203	102	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	7 - 249/1300	C9.3	162@2080	93	65	994@1300	192	89	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	8 - 326/1700	C9.3	239@2300	134	103	1047@1600	208	112	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	9 - 326/1700	C9.3	239@2300	134	103	1047@1600	208	112	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	10 - 224/2100	C9.3	202@2150	111	80	853@1000	175	59	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	11 - 244/2100	C9.3	220@2150	127	92	934@1000	175	59	DFI,TC,ECM,CAC,EGR,PTO
ECPXL09.3HPB	12 - 249/1300	C9.3	162@2080	93	65	994@1300	192	89	DFI,TC,ECM,CAC,EGR,PTO